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Melbourne
Astrographic Catalogue 1900·0

VOL. I.—ZONES -65° AND -66° .

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Melbourne Astrographic Catalogue 1900-0

VOL. I.—ZONES -65° AND -66° .

RECTANGULAR CO-ORDINATES AND DIAMETERS OF STAR IMAGES,

FROM PHOTOGRAPHS TAKEN AND MEASURED UNDER THE
DIRECTION OF

R. L. J. ELLERY, C.M.G., F.R.S.,
GOVERNMENT ASTRONOMER UNTIL 1895,

AND

PIETRO BARACCHI,
GOVERNMENT ASTRONOMER, 1895 TO 1915.

REVISED AND PREPARED FOR PUBLICATION UNDER THE
SUPERVISION OF

J. M. BALDWIN, M.A., D.Sc., F. INST. P.,
GOVERNMENT ASTRONOMER.

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Page	Star	Column			
2	52	5	<i>Omit</i>	9.0.	Mag. not printed in C.P.D.
10	146	1	<i>For</i>	20	<i>read</i> 11
10	147	1		11	20
11	134	1		10	16
38	424	1		10	18
38	425	1		9	18
53	440	1		9	21
53	440	2		-9.055	-9.059
168	124	1		11	12
183	82	1		19	9
204	410	1		14	22
280	504	1		18	15
328	5	1		20	16



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INTRODUCTION.

GENERAL SUMMARY.

Shortly after the first International Astrographic Congress in Paris in April, 1887, the Victorian Government consented to the Melbourne Observatory joining in the undertaking, a sum was placed on the Estimates to meet the necessary expenditure, and the order for the telescope was placed with Sir Howard Grubb, of Dublin.

Pending the completion of the telescope, plans for the building were drawn, the building was proceeded with, and was completed in March, 1890. The building is to the south of the main Observatory buildings, and close to them. It consists of a rectangular structure about 19 feet square inside, 18 feet from the ground to the base of the dome, and the dome itself is 18 feet 4 inches diameter inside. The opening is from the base to about 2 feet past the highest point of the dome. It is 5 feet wide at the base and 2 feet 6 inches at the top. The shutter is pivoted outside the base of the dome opposite the centre of the opening. The form of opening and shutter is copied from the design of Sir David Gill.

The interior of the building consists of a telescope room 18 feet 6 inches square and 8 feet 4 inches high from the floor to the base of the dome; in the centre is the pier for the instrument, just about floor level. Below is a large photographic room, lobby, and store room. The telescope room is reached by a staircase from the lobby, landing in the south-east angle of the building.

The instrument is designed to satisfy the conditions laid down by the first International Astrographic Congress, and is similar to the instruments supplied to the Greenwich and Cape Observatories. It consists of a double telescope with equatorial mounting of the German type. One telescope has a photographic object glass 13.0 inches (33.0 cm.) in diameter and 136.8 inches (347.5 cm.) focal length, giving a scale of 0.9885 to 1 mm. The other, the guiding telescope, has an object glass 10.1 inches (25.7 cm.) in diameter and 135.6 inches (344.3 cm.) focal length. Shortly before the instrument was despatched from Dublin, it was found that the 10-in. object glass did not give perfectly symmetrical images of stars, and after reworking several times the crown glass lens (which appeared to be in fault) but always with the same result, Sir Howard Grubb came to the conclusion that the defect was in the glass itself. No other 10-in. disc was available at the time, and to avoid delay the instrument was sent out to Melbourne with the imperfect glass, but another lens was put in hand at once to replace the original, which, however, was "quite sufficiently good for the purpose to which it is specifically required." The photographic telescope is designed to carry a plate 16 cm. square, with provision for exact focussing and orientation. The guiding telescope has two slides at right angles which allow movement of the eyepiece, and permit the use of a guide star 45' from the centre of the field. The tubes are well away from the polar axis, so that the telescope can move for one and a half hours each side of the meridian without reversal. In spite of its considerable weight, the motion of the telescope in R.A. is easy. The mounting is solid and substantial, well designed and made. The driving clock is controlled electrically and kept in synchronism by a seconds pendulum, the detector and differential gearing acting exceedingly well. (For description see *Proc. Inst. Mech. Eng.*, p. 311, July 31, 1888.)

The instrument was delivered at the end of December, 1890, and was unpacked and erected in January, 1891. Several of the cases were damp, and the iron and steel had rusted in many parts. The paper and absorbent cotton in which the object glasses were packed were damp, and fungous patches showed on the glass. The lenses were, therefore, separated and cleaned before being placed in the tubes.

From time to time changes have been made, but in many cases it is not possible to record all of the changes made. A list of the changes and adjustments in chronological order follows.

1891.—

Oct. 13.—Plate adjusted perpendicular to axis.

Oct. 26.—Plate end of astrographic telescope oiled, as inner tube was very rusty and worked badly. After cleaning the telescope can be relied on for small movements.

Oct. 28.—Attached scale and vernier adjusted.

1892.—

May 9.—New object glass put in guiding telescope.

May 18.—New orientation scale put in guiding telescope, vernier 20".

Reduced ring for inner tube of guiding telescope, bearings 120° apart, one with leather lining.

May 20.—Focussing scale redesigned, index line on glass fixed to outer tube.

July 6.—New orientation scale. Scale adjusted.

Oct. 17.—Plate holder turned 90° so that the E. side and the two studs against which the plate is held are at the bottom when telescope pointed at pier.

Nov. 28.—Larger wheels put on to push plate. The old wheels were too small to push plates.

1893.—

Feb. 7.—New wires put in focal plane of guiding telescope, the second and third exposures. Previously the scales were reset.

June 6.—Object glass taken out of guide telescope and cleaned.

1896.—

Aug. 28.—Steel studs for adjusting plane of plate put in end of photographic telescope; two had dropped out, giving an error of 11' in the plane of the plate.

1897.—

April 13.—New steel foot put below the governor, in place of the agate one, which was found to be cracked.

1898.—

May 12.—End of spindle of governor and the foot on which it turns, which were worn, were made smooth.

1899.—

June 27.—Sector ran out and bent the thread on axis. Straightened.

1900.—

April 19.—Wires inserted in guide telescope for triple exposure charts.

1909.—

July 2.—Tilt of 13-in. lens 1'0.

July 5.—13-in. lens removed, separated, cleaned, and replaced. 10-in. lens removed, outside surfaces cleaned, and replaced.

July 7.—Larger wheels put on to push plate against studs.

1909.—

July 8.—Tilt of 13-in. object glass 0'8, of 10-in. 1'1.

July 9.—Inclination of plate 2'4.

July 12.—Inclination of plate reduced to 0'7.

h polar axis, worm wheel and
and oiled. The sector had been
er stop and was not in proper
worm wheel. After adjustment
throughout. The sector was found
at not enough out to disturb the

and 10-in. object glasses cleaned.
Inclination of plate 0'5.

ass removed, as a large amount of
between the lenses. Lenses taken
dried, and replaced. Tilt of object
face of 13-in. object glass cleaned.

object glass 1'2, of plate 0'9.

for correcting change of focus due to
fixed to 13-in. telescope.

of inclination of the telescope axes,
approximately $c=2'$, $i=6'$, reduced by inserting
 $i=54''$, $i=56''$.

surface of object glasses dusted.

clock thoroughly cleaned. New shaft for
Dust covers fitted to pier. Breech piece
aned, and replaced. Objectives removed,
out and cleaned, replaced, and readjusted.
ed.

object glasses centred and plate adjusted.

Object glasses dusted and centred and plate

The adjustments of the polar axis were verified frequently during the course of the work, and never required more than slight alteration. In the earlier part of the work the adjustment in azimuth was tested by observing if a star near the meridian and near the zenith kept on the cross wires of the guide telescope for, say, 20 minutes; the adjustment in altitude by observing a star near the six-hour circle in a similar way. From 1909 onwards the telescope was set at Dec. -90° , and three exposures were made with the telescope in the meridian, first E. of the pier, then W., then E., the time of the second exposure being midway between the other two. This defined the positions of the celestial pole and the instrumental pole on the plate, and thus the error of the instrumental pole. This error was always small.

In the plates taken up to 1892 June 6, the zero of the orientation scale was obtained from the trail of an equatorial star, and the same reading of the scale was used for all declinations. From 1892 June 7 to 1893 June 10, the zero was determined from the trail of a star about -70° declination, and was corrected to the equinox 1900. From 1893 January 10, two trails were taken, one of an equatorial star, the other of a star about -70° declination, and the formula $A + B \tan \delta$ was used to determine the reading of the orientation scale for any declination, A and B being found from the two trails, and the correction to the equinox 1900 being applied. In December 1898, the formula $A + B \sec \delta$ was used in a similar way and continued in use until 1909 Aug. 26, after which date at least three trails were taken for determining the values of θ_0 , c and i in the formula $\theta_0 + c \tan \delta + i \sec \delta$, and the proper orientations given to each plate, corrected to the equinox 1900. These observations

for the orientation of the plates were taken about once a month until the later stages of the work, when such frequent verification was considered unnecessary.

After the first few months of use, plates for the determination of the focal plane seem to have been taken very seldom until 1909, but, so far as can be gathered, the nominal setting of the plane of the plate remained unaltered until 1901. Then a change was made in the setting, but there is no record to show whether this change was permanent or not. It agrees closely with the setting after 1909. This constancy, however, is only apparent, as a change in orientation produces a change in the plane of the plate, and there is no indication that this change was corrected for in the work before 1909. After that date this correction was made, and in 1915 Feb., an additional scale was put on the breech piece with divisions corresponding to those of the orientation scale, and the correction was made by setting both scales at the orientation reading. Any change of focus, however, is not sufficient to affect the star images materially, but it has seemed undesirable to make any assumption as to the constancy of scale value, and the constants for each plate have been determined independently.

All the plates for the astrographic catalogue and chart have been taken close to the meridian, with the telescope to the east of the pier (counterpoise preceding.) The first of the photographs used in the present catalogue was taken on 1892 Jan. 30, the exposures given being 6m, 3m, and 20s, but for all catalogue plates from 1892 Feb. 27, onward the exposures have been 5m, $2\frac{1}{2}$ m, and 20s. Soon after the plate had been taken, generally the next day, the image of the réseau was printed on the plate, the lines of the réseau being ruled through the opaque coating of a plane glass plate. These lines form two systems of equidistant lines at right angles, the spacing between the lines of a system being 5 mm. The plate was placed in the holder containing the réseau, so that the coated sides were facing, and separated only by thin metal pieces in the corners. The holder was placed in a beam of parallel light, the dark slide withdrawn, and the plate exposed for a definite period, which was determined from time to time, so as to give satisfactory images of the réseau lines. In printing the réseau, the source of light was a kerosene lamp or electric light placed behind a small opening slightly to the side of the principal focus of a parabolic mirror, the light after reflection falling on the réseau, which was placed at the side of the opening. After development, the plate was examined to see if the star images were satisfactory, if the réseau lines were good, and if the guide star were in the correct position on the plate. As the measurement of the position of a single star was not sufficient to verify that the correct region had been taken, it became the custom after 1909 to identify and measure a second star on the plate. Very narrow limits of error were allowed in the early plates, but apparently were not adhered to, for on the re-examination of the plates in 1914 many were found outside the limits, and the limits were extended considerably, but kept such that the error in setting should lead to no error in the positions deduced from the plate. The criterion then adopted was that the sum of the errors in the two co-ordinates should not amount to 1'. Actually the setting in the telescope is much closer than this, amounting to only a few seconds, but the larger errors seem to have been due to the plate not being properly against the studs in the réseau printing frame, which are intended to determine the position of the edge of the plate. Such a displacement would evidently not affect the accuracy of the positions deduced from the plate.

In connexion with the catalogue plates it has been the custom to secure photographs once a month of one or other of the type regions selected by Professor Pritchard, of Oxford. Each of these photographs was examined to see if the sensitiveness of the plate had been sufficient to allow stars of the 11th magnitude to give measurable images with a 5-minute exposure, and stars of the 9th magnitude with a 20-second exposure. From 1895 Feb., a plate of the south polar region has been secured each observing night, which was intended to assist in the reduction of the plates taken that night to an equal standard of transparency of the atmosphere and sensitiveness of plate.

Ilford plates were generally used, but other makes have at times been tried. From 1914 Dec., plates coated locally by Baker and Rouse (Kodak Australasia Ltd.) have been used. These plates are all on special glass, and have two edges ground perpendicular to each other. Up to 1892 Oct. 18, both ground edges were pressed against agate studs in the telescope. The plate-holder in the telescope was then turned 90° in its plane, and one ground edge was pressed against two studs, a rough edge against the third stud. From 1909 Aug., both ground edges were pressed against the studs in the telescope and in the réseau printing frame. Although the rough edge may cause a slight displacement of the plate in its plane, it will not lead to any error in the reduced star positions.

The plate having been passed as satisfactory, it was put aside for measurement. Owing to the lack of assistants, the work of measurement could not be undertaken until several years after the photographic work had been started, and it was not until 1898 Nov. 1, that the first appointments were made, and six ladies commenced their training in the measurement of the plates. In general, therefore, a considerable interval has elapsed between the exposure of the plate and its measurement. In the measurement of a plate, two observers took part, one measuring the northern half, the other the southern, the one not measuring recording for the other. After completing the measurement of the stars on the plate in one position (direct), the plate was turned through 180° in its plane and the measures repeated (reverse). The two measures were combined to give the position of the star referred to the réseau lines bounding the square in which the star was. Each star intended to serve for determining the plate constants was measured independently by two observers, and the mean of the two results adopted. As the original distribution of these reference stars was by no means uniform, a large number of additional stars was selected in 1909, so that in many cases a considerable number of years may have elapsed between the measurement of the reference stars by the two observers.

In the original measures, the stars are arranged in order of increasing x co-ordinate (R.A.) in strips of $5'$ in width (one réseau interval), the successive strips being in order of declination from north to south for each half of the plate. In 1909 consideration was given to the form in which the catalogue should be printed, and it was decided that—

- (1) the plates for each zone should be printed in order of R.A. of centres, the zones being arranged in order of declination, starting at -65° ;
- (2) the stars on each plate should be numbered separately;
- (3) the stars should be arranged in order of x increasing for each half of the plate in y , the northern half of the plate being printed first;
- (4) the centre of the plate should be taken as the origin of co-ordinates;
- (5) the co-ordinates as printed should be the measured co-ordinates corrected for errors of the réseau;
- (6) the diameter of the image should be given;
- (7) the measured co-ordinates should be printed to $\cdot 001$;
- (8) the constants to reduce from measured co-ordinates to standard co-ordinates should be given at the head of each plate in the form—

$$\xi = x + ax + by + c$$

$$\eta = y + dx + ey + f,$$

the values of the constants being determined independently for each plate.

The form of publication was discussed with Sir Frank Dyson in 1914, and on his recommendation it was decided that—

- (9) the identification of all C.P.D. stars in the catalogue should be given.

In preparing the measures for publication, it became evident that there had been great variation in the sensitiveness of the plates used or in the atmospheric conditions, or both, and in consequence many of the plates which had been passed as satisfactory prior to 1909 were rejected and fresh plates of the same region were obtained. Also on compiling a list of the diameters of stars for Professor H. H. Turner in 1915, the estimates of the

diameters on two of the earlier measuring machines used for measurement (Micrometric and Comb) were found to differ so greatly from those on the other machines that it was considered advisable to discard all the diameters estimated or measured on these machines and to re-determine them on another measuring machine (Repsold 2).

Having given a brief survey of the work, a more detailed account of the methods adopted in the measurement and reduction of the plates will be given.

THE MEASURING MACHINES.

The first machine used for measuring the astrographic plates was spoken of as the Slide Micrometer. It was designed in 1891 by Mr. Ellery, primarily for the examination and measurement of the astrographic plates, but it was also made applicable to comparing, testing, and constructing linear scales up to 12 inches in length. The construction was carried out in the Observatory workshop.

A further machine was constructed in 1892—the micrometric machine—the general character of which is indicated in the description given in the section dealing with the determination of the errors of the réseaux.

In the earlier years of the work, however, no assistance was available for the general measurement of the plates, and the measures were confined to five stars per plate which were to be observed with the transit circle, and used as reference stars for the determination of plate constants.

In January 1898 an arrangement was made with Mr. H. C. Russell (Government Astronomer for New South Wales) by which it was proposed that the measures of both the Sydney and the Melbourne plates should be carried out in Melbourne. The consent of the two Governments was obtained, and in November 1898 the first assistants for the measurement were appointed.

In 1899 Mr. Baracchi reported as follows :—

“The measures are at present being made with three machines, one of which is the large micrometric machine, originally used for ruling the Melbourne réseaux. . . . The second machine is the one which has been at work for some years for measuring the co-ordinates of stars selected from the catalogue plates for observation with the transit circle, using for this purpose Professor Turner's micrometer scale, made by Troughton and Simms.

“The third is the old simple microscope stand, for which a new stage has been made. . . . The essential parts of these three machines . . . consist of a microscope with filar micrometer, interchangeable with Professor Turner's micrometer scale, under which any part of the photographic plate is brought into view by moving a double-slide stage on which it rests, the motion taking place in two directions parallel to the réseau lines, and the stage being provided with quick and slow motion arrangements, adjustments for maintaining a constant distance between the plate and the objective, orientation, scales for identifying the squares under observation, &c.

“These instruments have served admirably for the training of the observers, and the measurements now being made with the filar micrometers possess all the requisite accuracy, the probable error of a measured co-ordinate being, in fact, no greater than $0''.1$, which is within the prescribed limit; but the progress of the work has been intolerably slow, owing to the great amount of labour required in making the observations with this kind of micrometers, and consequent computations. There is no doubt that by using Professor Turner's scale the measures could be carried on at a speed four or five times as great as with filar micrometers.

“This instrument has been adopted at Greenwich and Oxford, and its great simplicity and apparent facility in its use tempted me very strongly to adopt it for Melbourne. It has been employed here for some years for the special purpose already mentioned . . . but I regret to say that in our experience the probable error of the measured co-ordinates exceeds $0''.5$, which is at

least three times greater than the limiting error assigned by the regulations. For this reason I have been obliged to abandon Professor Turner's method."

In the next report (1899-1900) it is stated with regard to these three machines that "it was intended that they should be used only temporarily, pending the installation of more serviceable instruments. A measuring apparatus made by Repsold and Sohne, of Hamburg, similar to that of the Cape Observatory, devised by Dr. Gill, arrived in Melbourne in January" (1900). For description see *Monthly Notices*, R.A.S. 59, p. 61, 1898.

"Towards the close of 1899 a new micrometer microscope was made in Melbourne, following, in part, the plan of Dr. Gill. . . . It differs from the Repsold micrometer, in having only the two opposite sides, instead of the whole fixed square of webs, and only one movable slide instead of two, as provided in the latter instrument, but is similar to it in all other main features. As it has only one measuring screw, the two co-ordinates of a star image have to be measured one at a time by turning the micrometer box 90°. This necessarily makes its measuring speed slightly less than that of the Repsold apparatus, but it is about three times quicker than the three Melbourne micrometers previously in use. The Melbourne and Sydney plates are now being measured by these two new instruments."

1901-02. "Consequently, four of the six measurers were obliged to use the Melbourne filar-micrometers, which, though perfectly suitable in point of accuracy, cannot be expected to do more than one-third or one-fourth the amount of work that can be done in the same time with the Repsold micrometer."

The second Repsold micrometer reached the Observatory in September 1902, and later was put into regular use. The custom has been to use the two Repsold machines as far as possible, and the slide machine in preference to the other two.

THE ERRORS OF THE RÉSEAUX.

NOTE.—This portion of the introduction was written as a thesis to which the Syme Prize, 1914, was awarded by the University of Melbourne.

It is the practice to print on all plates taken for the astrographic catalogue and chart prior to development two systems of equidistant parallel straight lines at right angles to one another.* These lines, generally referred to as the réseau, facilitate greatly the measurement of star positions, the position of a star being referred to the sides of the small square (5 millimetres in side) in which it lies. Thus the maximum distance to be measured is only 5 millimetres, which simplifies the necessary apparatus, and in addition the effect of any distortion of the film during and after development is largely reduced, the only part that now influences the measured position of the star being confined to the 5-mm. square.

Having measured the position of each star on the plate with reference to the sides of the square in which it lies, it is further necessary to determine the relative positions of all the lines of the réseau, so that all the stars may be referred to the same two lines as axes. It must be noted, however, that the lines as printed on the plate (before development) may not correspond exactly to the lines of the original réseau. This difference, spoken of as "projection error," is due to the point used in ruling the lines on the silver film cutting a prismatic furrow in the glass, and thus producing refraction of the parallel beam used in printing the réseau.

If then the errors of the original réseau be investigated, and the corrections obtained be applied to the measured star positions, this projection error will have been neglected. If, on the other hand, the errors of the réseau copies be investigated, the results will be affected by any non-linear distortion of the film, and a considerable number of plates must be measured to eliminate the effect of the irregularities so produced. Only distortions of an accidental nature will be eliminated in this way, non-linear

distortions of a systematic nature (and such are readily conceivable) will remain, and will be wrongly introduced as a part of the correction. In this latter method the work involved in determining the errors of copies of even a single réseau is tremendous, and of more than one réseau quite out of the question to carry through fully.

The method adopted in the investigation of the réseaux used at the Melbourne Observatory, where eight réseaux have been used, has been to determine the errors of the original réseaux, and so far as I know the only observatory that has departed from this practice is Potsdam, where a complete study of a number of copies of their réseaux was made.† Of the other observatories taking part in the astrographic catalogue, the only case in which no assumption was made as to straightness or similarity of the lines was at the Cape,‡ where every point of intersection of a réseau had the corrections fully determined. In each case the réseau used was made by Gautier, and the corrections found have in most cases been small. This, however, has not always been the case, as for instance in the réseaux Gautier No. 79 and Gautier No. 89 used at Toulouse, for which errors as large as .010 mm. occur.

The réseaux used at the Melbourne Observatory in the earlier part of the work were also made by Gautier, but very considerable trouble was experienced from pinholes being formed in the silver film on which the lines were ruled. In consequence of this, attempts were made to rule the réseaux here, and several were constructed and have been used for the great majority of the plates of the astrographic catalogue and chart. For these réseaux, asphalt varnish was allowed to flow over a glass plate, and the lines were ruled through the varnish by means of a dividing engine. In the absence of data, it is evidently of the highest importance that the necessary corrections should be completely determined without any assumption being made as to the accuracy of motion of the ruling point or the parallelism of the lines. The same procedure has also been adopted in the determination of the errors of the Gautier réseaux that have been used.

THE INSTRUMENT USED.

The instrument used for the determination of the errors of the réseaux was a dividing engine, adapted for the measurement of the astrographic plates. The carriage of this dividing engine has two microscopes furnished with micrometers. For the measurement of the plates the whole instrument has been tilted about an axis parallel to the leading screw by the insertion of a wooden frame, so that the microscopes are inclined at an angle of about 45° to the vertical; iron frames for the support of the plate-holders have been attached under each microscope to the iron base of the dividing engine, and adjusting screws provided for the orientation of the frames relatively to the base. The frames have parallel V grooves, perpendicular to the leading screw, which serve as guides for the plate-holders. From the top of each plate-holder a cord passes parallel to the guides over a pulley, and has at the end a counterpoise, so that the plate holder is readily moved, and remains stationary in any position in which it is placed. To the right of each frame is a clamp and slow motion screw for moving the plate-holder along the guides. The carriage carrying the microscopes also slides along V grooves, parallel to the leading screw, a rapid motion being given by a rack and pinion in the front of the instrument, and a slow motion by clamping to the leading screw and turning the latter.

The microscopes slide in tubes for focussing, but there is no screw for fine adjustment. This renders focussing a troublesome

† H. Iudendorff, *Publ. Astrophys. Obs.*, Potsdam, No. 49.

‡ D. Gill and H. Jacoby, *Acta. Soc. Sci. Fenn.*, 23 No. 5, 1897.

The methods adopted at other observatories are given in the introductions to their astrographic catalogues—

Greenwich—*Astrographic Catalogue*, Vol. I., p. xxxvi.

Helsingfors—Anders Donner, *Acta. Soc. Sci. Fenn.*, 21 No. 8, 1894.

Paris—*Catalogue photographique*, Vol. I., p. 19.

Bordeaux—*Catalogue photographique*, Vol. I., p. 12.

Toulouse—*Catalogue photographique*, Vol. II., p. 11.

while at the following observatories the réseau corrections have been neglected or taken as accidental errors:—

Vatican—No mention of the réseau errors is made in the introduction.

Oxford—*Astrographic Catalogue*, Vol. I., pp. xxxiv-xxxvi.

Alger—*Catalogue photographique*, Introduction, p. xl.

Perth—*Astrographic Catalogue*, Vol. I., p. 6.

* Ch. Trepied, *Commentaires des décisions prises par les Conférences internationales pour l'exécution photographique d'une Carte du Ciel*, pp. 18-19.

process, the microscope having to be moved backwards and forwards in the tube, and also rotated until correctly adjusted for focus and for orientation of the micrometer wires. For the left-hand microscope (the one away from the head of the leading screw) the adjustment is specially awkward, as there is no fine adjustment for orientation such as is provided in the right-hand microscope. This latter microscope also admits of the rotation of the micrometer through 90°, and it would have been a great convenience if the left-hand microscope had allowed of this; but, owing to the poorer quality of the screw and the difficulty of reading off the head of the micrometer with the adjustment for orientation, it was decided to use it on the right hand side, where it is much less used, and arrange the observations so as to avoid any inconvenience from screw errors.

Some difficulty was found in getting a smooth motion for the microscope carriage; in the arrangement finally adopted, which worked quite satisfactorily, a weighted arm projected upwards from the carriage so as to equalize the pressure on the two V's, and the motion of the carriage was assisted by a weight, which exerted a pull parallel to the V grooves along which the carriage moved. The carriage was moved by the rack and pinion, as the leading screw could not be used on account of a periodic tilting introduced by it.

The plate-holder to the left was also altered so that when the plate is placed in it film up, the surface of the film comes into a fixed plane. The plate is pressed upwards by three springs against the rounded points of three screws passing through brackets on the plate-holder. These screws were adjusted so that the plane fixed by them should be perpendicular to the optical axis of the microscope. The frame was rotated until the motion of the plate-holder along the grooves was at right angles to the direction of motion of the carriage. The edges of the plate pressed against three stops, one of which was adjustable so that the plate could be oriented.

A scale was laid on the plate-holder to the right, and kept in a constant position so that when viewed through the right-hand microscope (referred to as microscope *A*) the reading of the scale and micrometer determined the position of the microscope carriage. The approximate position of the carriage was given by a rough scale fixed to the main framework on which the carriage slides.

INVESTIGATION OF THE APPARATUS.

(a) *Periodic Errors of the Micrometer Screws.*—For determining the periodic errors of the micrometer screws, (referred to as screws *A* and *C*, *A* being attached to the right-hand microscope, and *C* to the left-hand), the micrometer was mounted on a slide and the spider line viewed through a microscope, in the focal plane of which were two spider lines whose distance apart was adjustable, and was made to correspond to 0.5 rev. of the micrometer screw. Each half revolution of the micrometer screw under test was compared with this fixed interval, proceeding by tenths of a revolution over three revolutions, and three parts of each screw were tested. The results can be represented satisfactorily by the expressions—

$$\begin{aligned} \text{true reading} &= \text{actual reading} \\ &+ \cdot 0006 \sin \theta - \cdot 0000 \cos \theta \text{ for micrometer } C \\ &- \cdot 0006 \sin \theta - \cdot 0005 \cos \theta \text{ for micrometer } A \end{aligned}$$

where θ represents the fractional part of a revolution.

The periodic error may, therefore, be neglected for both screws.

(b) *The Progressive Errors of the Micrometer Screws.*—The progressive errors were determined by comparing the revolutions of the screw under test with fixed intervals as given by another screw. Each of the screws *A* and *C* was tested over twenty revolutions, the comparison being made in two steps. First, each five-revolution interval was compared with each of five intervals of the auxiliary screw, four such sets of comparisons being made. Then each one-revolution interval was compared with each of five intervals of the auxiliary screw, two such sets being taken. In deducing the correction for the one-revolution


intervals, the corrections for the five-revolution intervals were taken from the previous work. The final results obtained for the two screws are—

Micrometer C.

Rev.	—	Corr.	Rev.	—	Corr.	Rev.	—	Corr.	Rev.	—	Corr.
	rev.	rev.		rev.	rev.		rev.	rev.		rev.	rev.
10	—	·0003	15	—	·0001	20	—	·0001	25	—	·0001
11	—	·0004	16	—	·0001	21	—	·0006	26	—	·0022
12	—	·0003	17	—	·0006	22	—	·0014	27	—	·0011
13	—	·0014	18	—	·0020	23	—	·0006	28	—	·0002
14	—	·0002	19	—	·0013	24	—	·0008	29	—	·0015
15	—	·0006	20	—	·0017	25	—	·0024	30	—	·0001

Micrometer A.

Rev.	—	Corr.	Rev.	—	Corr.	Rev.	—	Corr.	Rev.	—	Corr.
	rev.	rev.		rev.	rev.		rev.	rev.		rev.	rev.
15	—	·0014	20	—	·0011	25	—	·0011	30	—	·0018
16	—	·0010	21	—	·0004	26	—	·0013	31	—	·0052
17	—	·0016	22	—	·0026	27	—	·0056	32	—	·0038
18	—	·0030	23	—	·0008	28	—	·0083	33	—	·0030
19	—	·0009	24	—	·0014	29	—	·0075	34	—	·0042
20	—	·0061	25	—	·0058	30	—	·0180	35	—	·0000

In these tables the first column in each section gives the reading of the micrometer, the division  of the comb in the microscope being taken as 20; the second gives the error of the interval, + indicating that the revolution of the micrometer screw is less than the mean revolution; the third column gives the correction that must be applied to the micrometer reading to give the reading that would be obtained with a perfect screw.

For micrometer *C* the maximum deviation of one revolution from the mean is ·002 rev., and hence if the readings are kept within half a revolution of a fixed reading in any one set, the maximum correction will be ·001 rev. and may be neglected. Actually the readings have been kept within ·3 rev. of a fixed reading in any one set.

For micrometer *A* the variation from the mean is much greater, namely, ·008 rev. Consequently throughout the observations the reading of micrometer *A* has been kept as nearly as possible constant for any one set, the carriage always being moved until the reading of the micrometer was within ·1 rev. of a fixed reading, and in consequence the correction for progressive error was less than ·001 rev. and so could be neglected.

Hence, in what follows no corrections have been applied for periodic errors or for progressive errors of the micrometer screws, these errors being considerably less than the errors of observation.

(c) *The Value of the Micrometer Revolution.*—From the way in which the measures have been made, the observations in any one set give readings which differ by only a fraction of a revolution from the mean reading for the set, and consequently the value of one revolution does not require to be very accurately determined, and the constancy of its value will depend very largely on the accuracy of focussing. A series of measures on a millimeter scale gave the following values, the series consisting of four measures of each of ten one-millimetre intervals of the scale—

Microscope and micrometer *C* 1 mm. = 13.93 revolutions,

Microscope and micrometer *A* 1 mm. = 16.00 revolutions,

and these values have been used throughout the reductions.

(d) *Determination of Scale Error.*—The scale used as a standard in the measurements for réseau error was kept always in a fixed position on the plate holder nearer the head of the leading screw of the dividing engine. Pointings on the lines were always made

with a pair of parallel spider lines, whose distance apart was slightly greater than the width of the lines of the scale as seen in the microscope. The illumination was from a mirror fixed centrally at the objective end of the microscope and tilted so as to give uniform illumination, an elliptical hole allowing of unobstructed view with the microscope. For determining the errors of this scale, an auxiliary scale was placed on the platform under the other microscope, and arranged so that it could be moved parallel to its length so as to bring the different divisions under the microscope. The work was done in two steps—

- (1) the errors of the 25-mm. intervals.
- (2) the errors of the 5-mm. intervals.

For the first step, each of the 25-mm. intervals of the fixed scale over the range used was compared with each of 5 intervals of the movable scale, and four such sets were taken. For the second step each of the 5-mm. intervals of the fixed scale over the range used was compared with each of 5 intervals of the movable scale, two such sets being taken. Each 25-mm. interval was treated separately, the error for the 25-mm. intervals being taken from the first step. The following table gives the division errors thus obtained:—

Unit ·0001 mm.									
2	+ 2	5	+ 5						
2·5	0	5·5	+13	8	+40	10·5	+34	13	+22
3	+ 9	6	+31	8·5	+36	11	+42	13·5	+16
3·5	+ 4	6·5	+19	9	+37	11·5	+24	14	+26
4	+ 6	7	+33	9·5	+25	12	+30	14·5	+ 8
4·5	+23	7·5	+47	10	+29	12·5	+26	15	0

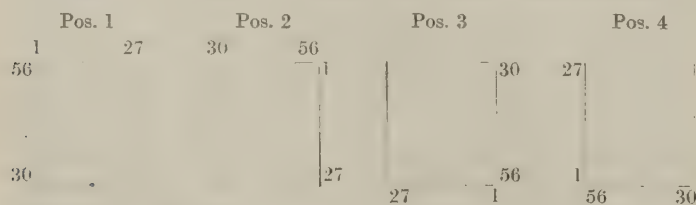
+ Indicates that the division line is displaced in the direction from 2·5 to 25.

The mean error of the determination of a 25-mm. interval is ± 0002 mm. and of a 5-mm. interval ± 0003 mm., while the mean error of determination of the division lines (lines 2·5 and 15 being considered correct) varies from ± 0002 for divisions 5 and 12·5 to ± 0004 for divisions 8·5 and 9.

MEASURES OF THE RÉSEAU.

The réseau is intended to consist of two series of equidistant parallel straight lines at right angles to one another, the distance apart being 5 mm. and the length 130 mm. The two series of lines are lettered *A* and *B*, the *A* series being numbered from 1 to 27 and the *B* series from 30 to 56. Increasing numbers in the *A* co-ordinate correspond on the plates to increasing R.A. and increasing numbers in the *B* co-ordinate to increasing South declination. In all the measures, the réseau was placed with the coated side up, so as to be brought into the plane determined by the three points on the plate holder. The illumination was from skylight, reflected by a mirror placed beneath the réseau.

On each réseau four lines symmetrically situated were taken as fundamental lines, the lines being 2 and 26, 31 and 55. The four positions of the réseau in the frame have been denoted thus—



For the complete determination of the errors of the réseau it is necessary to determine—

- (1) the interval division errors of the four fundamental lines;
- (2) the correction necessary to reduce the fundamental lines to a common scale.
- (3) the angle between the two systems of straight lines joining corresponding points on the fundamental lines;
- (4) the correction to rectilinearity for each réseau line.

In what follows, each of these corrections is determined separately, and then combined, as will be explained later, to give

the correction to the different points of intersection of the réseau lines and finally the correction to be applied to the measured co-ordinates of the star images.

THE INTERVAL DIVISION ERRORS OF THE FOUR FUNDAMENTAL LINES.

The scale defining the position of the carriage, for which the errors have already been given, was in its usual position under microscope *A*, and the réseau in position under microscope *C*, with one set of lines of the réseau parallel to the leading screw. The complete scheme of measurement for the interval division errors of the lines was—

Position 1. Along line 31—

Comparison of divisions 2, 2·5, 3, 3·5, . . . 14·5, 15 of the scale with lines 1, 2, 3, 4, . . . 26, 27 of the réseau and then repeated in the reverse order. (Time occupied, 40 to 45 minutes.)

Position 1. Along line 55—

Similar comparisons.

Position 3. Along line 55—

Comparison of divisions 15, 14·5, 14, 13·5, . . . 2·5, 2 of the scale, with lines 1, 2, 3, 4, . . . 26, 27 of the réseau and then repeated in the reverse order.

Position 3. Along line 31—

Similar comparisons.

The measures at the fundamental lines 2 and 26 were made twice to increase the strength of the determination, the mean length of the four fundamental lines serving as standard of length, and consequently the accuracy of the determination of the errors at the points depending to a large extent on the accuracy with which the errors of these fundamental points are known.

Positions 2 and 4. Similar measures along lines 2 and 26—

Two such series were made with each réseau.

No special provision could be made to keep the temperature uniform, so care had to be taken to protect the measuring apparatus from the heat of the observer's body by means of cardboard screens, and no observations were made when from any cause the temperature of the room was changing rapidly. Also, as seen from the programme above, the observations were arranged so as to eliminate errors due to progressive changes of a linear character.

In the reduction, the first step is to convert the micrometer readings into millimetres. Constants were subtracted from the micrometer readings to keep the remainders small and positive, and the remainders divided by 16·00 and 13·93 respectively. The division by 16·00 was done by the recorder mentally, the division by 13·93 by a special table which gives the quotient for each value from ·001 to ·700. The results are written down to ·0001 mm. Next the differences $A_{mm} - C_{mm}$ for the two halves of the set are written down (for positions 3 and 4 the differences are $C_{mm} - A_{mm}$), in some cases ·1000 being added throughout to keep the signs all positive. The mean of the two values is then taken and the scale correction applied, the result giving the interval division errors of the fundamental line. The reduction of this system of errors to the standard length is next performed (as will be explained later) and the result is the correction to be applied to the points of division of the fundamental line to make them equidistant and the proper distance apart. Finally the mean of the corrections so obtained from the two series of measures in positions 1 and 3 (or in positions 2 and 4) is taken, and used as the correction to the point on the fundamental line.

The signs are so chosen that + indicates that the point of division is displaced from the ideal position in the direction réseau numbers increasing.

THE REDUCTION OF THE FUNDAMENTAL LINES TO THE SAME SCALE.

Using the notation (2, 26)₃₁ to denote the interval from line 2 to line 26 measured along the line 31, the scheme of comparisons

comprises the comparison of the interval 2.5 to 14.5 of the scale with the sides of the fundamental square in the following order:—

Position 1 (26, 2)₅₅; (2, 26)₃₁; (26, 2)₃₁; (2, 26)₅₅.
 Position 3 (2, 26)₃₁; (26, 2)₅₅; (2, 26)₅₅; (26, 2)₃₁.
 Position 2 (55, 31)₂; (31, 55)₂₆; (55, 31)₂₆; (31, 55)₂.
 Position 4 (31, 55)₂₆; (55, 31)₂; (31, 55)₂; (55, 31)₂₆.
 Position 4 (31, 55)₂₆; (55, 31)₂; (31, 55)₂; (55, 31)₂₆.
 Position 2 (55, 31)₂; (31, 55)₂₆; (55, 31)₂₆; (31, 55)₂.
 Position 3 (2, 26)₃₁; (26, 2)₅₅; (2, 26)₅₅; (26, 2)₃₁.
 Position 1 (26, 2)₅₅; (2, 26)₃₁; (26, 2)₃₁; (2, 26)₅₅.

The time occupied for the complete set was 60 minutes.

Two such series were made with each réseau. The measures made in each position, and the method of reduction are shown in the table.

Réseau Melbourne No. 11.

Position 1 1913 July 28 10.57 — 11.4 a.m. Temp. 51°·4 — 51°·8 F.

	55	31	31	55
Scale: Line ..	14.5:26	2.5:2	14.5:26	2.5:2
Scale: Micr. A ..	21.941	21.937	21.938	22.000
Line: Micr. C ..	20.258	19.853	19.900	20.376
A (mm.) ..	+0.026	+0.023	+0.024	+0.062
C (mm.) ..	+0.329	+0.038	+0.072	+0.413
A (mm.) — C (mm.)	+0.697	+0.985	+0.952	+0.649
Scale corr. ..	+0.008	+0.000	+0.008	+0.000
	+0.705	+0.985	+0.952	+0.657
	—0.280	..	—0.205	..

In this table + indicates that the line is displaced in the direction réseau numbers increasing: — in the last line of each section indicates that the interval on the réseau is shorter than the standard interval determined by the lines 2.5, 14.5 of the scale. It is not necessary to apply the scale correction unless it is desired to deduce the réseau interval in terms of the scale interval. The mean of the different determinations (16 in all) of each interval is taken, and from the means the excess of each side of the fundamental square over the mean of the four sides of the fundamental square, which serves as the standard length, is obtained. The points on the fundamental réseau lines have already been referred to a system of equidistant points; the system of reference points is now changed so that—

- (1) the sum of the corrections along each line shall be zero.
- (2) the length of each side of the fundamental square shall differ from the standard length by the above-determined amount.

The first condition is fulfilled by diminishing each correction by the mean correction, and the second by applying a linear

$$\text{term} - \frac{n-14}{24} [(a-b) - c] \text{ along lines 31 or 55}$$

where a and b are the corrections at the points 26 and 2 respectively

c is the correction of the side to the standard interval,

and n is the number of the point,

and a similar expression along lines 2 or 26.

This total correction can be readily written down, and thus the points on the sides of the fundamental square referred to a system of equidistant parallel lines.

RECTANGULARITY OF THE SYSTEMS A AND B.

The angle between the two systems of lines has been measured in one of the Repsold measuring machines. The machine has two systems of wires in the microscope moved by two screws at right angles to one another, so that the two co-ordinates on the plates may be measured. The plate-holder can slide along two guides at right angles to one another and each parallel to one of the micrometer screws. There are the necessary adjustments for bringing the plate into a constant plane and for orienting the plate so that the réseau lines are parallel to the guides, and the plate may also be moved a short distance in its plane.

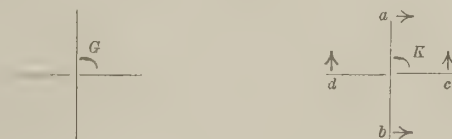
The carriage being set so that indexes marking its position read 27 and 30, the plate is put in position 1 and moved about in its plane until the lines 27 and 30 appear on the spider lines of the microscope and then the plate adjusted so that the line 30 is parallel to the horizontal guides along which the carriage moves. The carriage is now brought into definite positions in order, and in each position the micrometer is pointed on the réseau line and the reading taken. These positions of the carriage are the same—as accurately as the index giving the position may be set—throughout a whole series, and thus any error due to motion of the carriage is entirely eliminated. With the plate in position 1, the horizontal slide is clamped with the index at 14, and readings are taken with the A micrometer on the line 14 at the points 55 and 31. Next the vertical slide is clamped with the index at 43 and readings are taken with the B micrometer on the line 43 at the points 26 and 2. If the successive positions of the carriage as above are referred to as a, b, c, d , the readings are repeated in the order c, d, a, b .

The plate is next placed in position 2, adjusted in a similar manner and readings taken in the same positions of the carriage as before, and in the same order; the points on the plate now correspond to different positions of the carriage, and by combining the readings for positions 1 and 2 the angle between the two central réseau lines and also between the guides of the carriage can be determined.

Additional readings are taken in the different positions of the plate and arranged as far as possible symmetrically, a complete set consisting of readings with the plate in the following positions in order 1, 2, 4, 3, 3, 4, 2, 1, and in each position readings are taken at positions a, b, c, d, c, d, a, b , in order.

The final determination rests on two such series.

Let a, b, c, d represent the four positions on the plate that are measured; the arrows indicate the direction of increasing micrometer readings on the plate. Ten revolutions of either screw correspond to one réseau interval, and the distances ab, cd are each 24 réseau intervals.



Then $[(a-b) + (c-d)]/240$ gives the angle $(G-K)$, where G is the angle between the axes determined by the guides,

K is the angle between the réseau lines, as shown in the diagram,

and a, b, c, d , represent the micrometer readings in the four positions.

To determine the angle between the réseau lines let H be the angle between the lines 14 and 43 as shown, then from the different positions—

$$\begin{aligned} [(a-b)_1 + (c-d)_1]/240 &= G - \pi - H \\ [(a-b)_2 + (c-d)_2]/240 &= G - H \\ [(a-b)_3 + (c-d)_3]/240 &= G - \pi - H \\ [(a-b)_4 + (c-d)_4]/240 &= G - H \end{aligned}$$

From the positions taken in pairs the values of G and H have been computed, and the mean of the eight such values of each taken as the final values of G and H .

The angle H is the angle between the lines joining the four points used; it is necessary to apply the corrections to reduce these lines to the system of equidistant parallel lines, and so to determine the angle between the two systems. The necessary corrections are readily applied. For example, the corrections of Melbourne No. 6 are shown in the diagram, the arrows showing the direction of displacement to bring the actual line into coincidence with the ideal line.

Hence if H' is the angle between the two systems

$$\begin{aligned} H' &= H + \frac{0.0039 - 0.0026}{120} + \frac{0.0032 - 0.0028}{120} \\ &= (\pi/2 + 0.00010) + 0.00014 \\ &= \pi/2 + 0.00024. \end{aligned}$$

where $\pi/2 + 0.00010$ was the value determined for H .

To reduce the two systems to rectangularity, it will be necessary to alter the angle between them by $-.000024$. This alteration may be divided up in an arbitrary manner between the two systems—in each case the *B* system has been kept fixed, and the whole rotation given to the *A* system. For Melbourne No. 6 it will be necessary to change all the corrections along line 31 by an amount—

$$-.000024 \times 60 \text{ mm.} = -.0014 \text{ mm.},$$

and along line 55 by $+.0014 \text{ mm.}$

Thus the final corrections necessary to reduce the points of intersection of the réseau lines with the sides of the fundamental square to two rectangular systems of equidistant parallel lines are obtained.

RECTILINEARITY OF THE LINES.

The apparatus used for investigating the rectilinearity of the lines was the dividing engine, the micrometer attached to microscope *C* being turned so that the micrometer screw was at right angles to the leading screw of the dividing engine. The plate was fixed in the usual way in the plate-holder, and pointings were made at each intersection along each réseau line, thus giving the displacement of the réseau line at right angles to its length from the line traced out by the optical axis of the microscope as it moves along the guides. With the plate in position 1 these measures were made for all the lines of system *B*; the plate was then removed, and a long spider line was mounted so as to occupy the position of one of the lines, and the readings of the micrometer taken at the points corresponding to the points of intersection on the réseau lines. In this way the correction to reduce the path of the optical axis to a straight line was determined, which, being applied to the readings previously obtained for the réseau line, gives the correction to reduce the réseau line to a straight line. The full scheme of measures was as follows:—

Position 1.—All lines of system *B* measured, all points of intersection with the sides of the fundamental square being measured twice.

Measures on the spider line for the positions corresponding to the *A* lines in position 1.

Measures on the spider line for the positions corresponding to the *A* lines in position 3.

Position 3.—All lines of system *B* measured.

Position 2.—All lines of system *A* measured.

Measures on the spider line for the positions corresponding to the *B* lines in position 2.

Measures on the spider line for the positions corresponding to the *B* lines in position 4.

Position 4.—All lines of system *A* measured.

The measures in each position occupy about four hours, and on the spider line about 45 minutes. The measures for the full scheme extended over two weeks.

To reduce the measures, the means of the micrometer readings (five) at the different points along the spider line were taken, and then the linear function most nearly coinciding with the mean readings determined by a least square solution. Differences (computed—observed) gave the corrections necessary to be applied to the micrometer readings at the points concerned to reduce to what the reading would have been had the motion been rectilinear. Next the corrected readings were converted into millimetres, a constant number of revolutions and tenths being subtracted throughout as usual so as to keep the resulting numbers small and of the same sign throughout. This gives the corrections necessary to reduce the réseau line to a certain straight line. To further reduce, so as to obtain the corrections to refer it to the line formed by the join of the ideal points on the sides of the fundamental square with which it nearly coincides, a linear term must be added, such as will make the corrections at the points on the fundamental lines the same as already determined in the earlier part of the work. A small table was constructed, so that these terms can be written down very readily and thus the corrections to the ideal line obtained.

TABULATION OF CORRECTIONS.

It now remains to combine and tabulate the different corrections. Each correction has been determined in two positions of the plate, and so the first step is to take the mean of the two values so obtained for each point, and use this mean as the definitive correction for the point of intersection considered.

To determine the corrections to be applied to the measured co-ordinates of any star, the correction in each co-ordinate over any 5-millimetre square has been taken as the mean of the four corrections in that co-ordinate at the corners of the square. These means have been formed, and are given in the tables appended, and are the definitive corrections to be applied to the measured star positions to obtain the actual position referred to the plate centre. In these tables, and throughout the reductions, the corrections are given to $.0001 \text{ mm.}$, to avoid the accumulation of errors. For use in the formation of the astrographic catalogue, in which the measures are given to $.001 \text{ mm.}$, tables of corrections have been formed from these in which the corrections have been rounded off to $.001 \text{ mm.}$

It is seen at once from the tables that there is a marked difference between the magnitude of the corrections to the réseaux ruled at Melbourne, and those ruled by Gautier. For the réseaux Melbourne No. 23 and Melbourne No. 11 the errors are largely due to two causes, want of rectangularity and difference of scale of the two systems, which may account for errors as large as $.009 \text{ mm.}$ and $.007 \text{ mm.}$ in the two cases respectively. For the astrographic work these two sources of error might be neglected, as in the determination of plate constants the orientations of the two axes and the scales in the two directions are found independently. For Melbourne No. 6 the errors arise chiefly from want of equidistance and irregularity of the lines. The reduction of each of the sides of the fundamental square to the standard length, the angle between the systems, and the average correction (independent of sign) are given below for each réseau—

—	M 23.	—	M 6.	G 33.	M 11.	G 27.	G 23.
Reduction to Standard Length.							
	mm.		mm.	mm.	mm.	mm.	mm.
(4, 24) ₃₃	-.0030	(2, 26) ₃₁	+.0015	+.0001	-.0043	+.0008	+.0016
(4, 24) ₅₃	-.44	(2, 26) ₅₅	+.22	-.1	-.15	-.7	+.4
(33, 53) ₄	+.40	(31, 55) ₂	-.25	-.3	+.21	+.4	-.3
(33, 53) ₃₄	+.34	(31, 55) ₂₆	-.12	+.4	+.37	-.5	-.16
Angle between the Systems <i>A</i> and <i>B</i> .							
90°	| + 19° |	..	| + 5° |	| + 1° |	— 17°	0°	| + 1°
Average Corrections (regardless of Sign).							
..	mm. .0035	..	mm. .0025	mm. .0006	mm. .0027	mm. .0007	mm. .0005

These give further evidence of the accuracy of the réseau ruled by Gautier.

NOTES ON THE RÉSEAUX.

Melbourne No. 23.—This was the first réseau studied, and the investigation differs in some particulars from the programme given above. In the first place the fundamental square was taken as formed by the lines 4 and 24, 33 and 53, and the work modified accordingly. The reason for choosing these lines further from the edge was to allow of a better comparison with copies of the réseau. Next it was not originally planned to reduce the *A* and *B* systems to the same scale (in the astrographic work, where the scale in each co-ordinate is determined independently, it is not necessary to do so), but later this has been done. There was a slight difference (less than 1° F.) in the temperatures at which the two pairs of lengths (4, 24)₃₃, (4, 24)₅₃, and (33, 53)₄, (33, 53)₂₄ were compared with the standard scale. The temperature co-efficient was determined from the observations (the available range being $8^\circ.5 \text{ F.}$), and the necessary small corrections applied to reduce the two pairs to a common temperature, and thus enable each line to be referred to the mean of the four lines as a standard. Further, in the observations for rectilinearity the points for which the corrections to the guides were measured were 0.2 inches apart, and thus did not correspond

to the réseau lines. The corrections were interpolated, but it was found necessary to apply an additional correction determined from the differences obtained in the two positions of the plate. The effect of this additional correction on the mean is very small.

In view of the large number of plates for which it has been used, two series of measures were made, and the results reduced independently to enable the mean error of the determination to be found. The mean error of the mean of the two series is $\pm .0006$ mm., in which the mean error of the scale correction is not included.

The lines of the réseau are good.

Melbourne No. 6.—The lines of this réseau are irregular, and vary very much in width along a line, and different lines are of different widths. In consequence, the measures have been duplicated.

Gautier No. 33.—The lines are very fine and uniform, but the film has been very much scratched, so that in several cases it is impossible to point on the line. In such cases the correction has been interpolated.

Melbourne No. 11.—In this réseau the lines are wide. The *B* system was apparently ruled first, and these lines are as a rule good, but the *A* system shows many irregularities in the lines, which often change in width in crossing one of the lines of the *B* system.

Gautier No. 27.—The lines are regular, but measurement was in some cases difficult, owing to their narrowness.

Gautier No. 23.—The lines are very good and of suitable width for measurement. The réseau is not at the centre of the plate, and in consequence when pointings were made on the réseau lines in two positions of the plate the line of the scale was too far from the centre of the field of view to be measured. Hence for this réseau the scale had to be moved in the measurements for equidistance and parallelism, so as to bring the division to the centre of the field of view. The motion was about 1 mm., and the corrections to the scale have been assumed to be the same as in the usual position.

COMPARISON OF COPIES WITH THE ORIGINAL RÉSEAU.

The equidistance and parallelism of the lines of five copies of the réseau Melbourne No. 23 have been investigated. The numbers and dates of exposure of these copies are—

1122	..	1894, October 2.
1248	..	1895, April 30.
1395	..	1895, September 13.
1540	..	1896, June 10.
1717	..	1897, September 13.

For equidistance, measures were made, in the same way as for the original réseau, at each intersection along lines 4 and 24, and lines 33 and 53, the intersections being taken first in the order réseau numbers increasing and then immediately after in the reverse order. The intersections along each line were measured in two positions of the plate. For parallelism, the measures corresponded to one set of measures on the original réseau, giving eight comparisons of the intervals.

To compare the results with those for the original réseau, all the results have been reduced to the same temperature (65°F.), the temperature coefficient being assumed to be the same as for the measures of the original réseau, which cannot be far from the truth. From the numbers obtained in this way the alteration in the length of the side of the fundamental square (100 mm.) that has taken place in printing and development is—

—	1122.	1248.	1395.	1540.	1717.
	mm.	mm.	mm.	mm.	mm.
(4, 24) ₃₃	— .0051	— .0076	— .0088	— .0024	— .0044
(4, 24) ₅₃	— 52	— 91	+ 56	— 46	— 58
(33, 53) ₄	— 7	— 73	— 24	0	— 2
(33, 53) ₂₄	+ 23	+ 59	— 90	— 23	— 9

This table shows that in general a contraction of the film occurs in development, but in some cases the length of the lines remains practically unaltered, while occasionally a well-marked dilatation occurs. The distortions do not appear to conform to any rule, in some cases the changes in length of opposite sides being nearly equal, in other cases very different. In each case where a side has increased in length in development, the opposite side has contracted. The maximum change shown in the table is a contraction of .009 mm. in the length of 100 mm.

Of greater importance for the astrographic work is the amount of distortion which occurs in the 5-mm. interval between two consecutive réseau lines. To examine this, the same standard of length, namely the mean of the four sides of the fundamental square of the original réseau, has been used in the reductions to determine the errors of the different points of the copies. The further condition has been imposed that the sum of the corrections is zero for each line. The angle between the two systems of lines has also been measured, and the corrections necessary to reduce to two systems of lines at right angles have been applied—the *B* system being kept fixed as before. The differences between the resulting corrections and those of the original réseau give the displacement of each point of intersection along the fundamental lines in the copy relative to the corresponding point of the original. The average displacement (without regard to sign) is .0025 mm. while the maximum displacements that occur are—

for the <i>A</i> system	..	..	.0122 mm.
for the <i>B</i> system	..	..	.0106 mm.

the displacements including projection errors as well as errors arising from contraction or expansion of the film.

To find the alteration in length of 5-mm. intervals, the differences of the displacements at consecutive points have been formed and tabulated. The amount of change that has occurred is in no case large, the average value (without regard to sign) being .0010 mm., the maximum value — .0059 mm., and there being only two other values, of the 520 examined, greater than .0040 mm. The larger distortions occur more frequently as the ends of the line are approached. These changes include errors of measurement, and as each value depends on the difference of two errors of the réseau and of two errors of the copy, the total error due to this may form a considerable part of the observed change in length. The maximum value found by Ludendorff (*loc. cit.*) was about .010 mm., but in his work the lines were taken nearer the edge than in the above, and the change of length measured was perpendicular to the edge that lay close to the line; here it has been parallel.

There is a tendency for the differences for any particular interval on the five plates to have the same sign—this is partly due to the contraction which generally follows development, and partly also to projection errors which appear to be present, the maximum projection error indicated being about .0015 mm.. Non-linear distortions systematic for all the plates, if such occur, are smaller in amount. The number of plates examined is, however, not sufficient to establish these points with certainty, but it seems probable that for this réseau the projection errors are little if at all greater than stated. At least twice the number of plates would have to be measured to reduce the effect of distortions of an accidental nature sufficiently to determine the errors of the copies as printed—such a multiplication of the work would have rendered its completion impossible, and for this réseau at any rate no serious error is likely to occur owing to the projection errors being neglected.

Tables of Corrections for the six Réseaux—

Melbourne No. 23
Melbourne No. 6
Gautier No. 33
Melbourne No. 11
Gautier No. 27
Gautier No. 23,

are appended.

TABLE OF CORRECTIONS.

RÉSEAU MELBOURNE No. 23.

Unit ·0001 mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
30																												30		
	A	0	-30	-25	-18	-45	-55	-53	-59	-60	-67	-75	-91	-106	-100	-99	-94	-85	-72	-58	-39	-43	-46	-35	-27	-19	+1	A		
	B	-45	-43	-46	-45	-44	-42	-42	-45	-40	-38	-42	-45	-46	-48	-50	-50	-51	-47	-50	-52	-50	-51	-53	-54	-59	-64	B		
31	A	+4	-29	-27	-21	-46	-54	-51	-59	-59	-67	-73	-88	-103	-100	-99	-93	-84	-70	-56	-38	-41	-47	-36	-26	-19	+1	A		
	B	-29	-26	-27	-28	-30	-29	-28	-29	-27	-25	-26	-27	-29	-31	-33	-35	-36	-33	-35	-37	-35	-35	-37	-42	-45	-46	B		
32	A	+6	-28	-27	-20	-44	-50	-49	-58	-57	-64	-72	-89	-102	-96	-97	-94	-84	-70	-56	-35	-38	-46	-35	-25	-18	0	A		
	B	-17	-12	-12	-13	-17	-16	-13	-14	-10	-9	-13	-13	-12	-14	-15	-19	-21	-15	-15	-17	-17	-18	-19	-22	-24	-23	B		
33	A	+8	-25	-23	-15	-38	-44	-46	-56	-56	-62	-70	-87	-99	-91	-93	-93	-84	-67	-52	-33	-37	-43	-32	-22	-15	+6	A		
	B	(-2)+3	0	-1	-3	-3	+1	+2	+6	+5	+2	+1	-2	-3	-5	-7	-5	0	-1	-3	-5	-5	-4	-6	-10	-11	B			
34	A	+8	-24	-24	-15	-36	-44	-44	-54	-53	-59	-70	-86	-98	-89	-91	-90	-81	-66	-50	-33	-36	-43	-31	-20	-14	+8	A		
	B	(+23)+23	+23	+20	+22	+18	+16	+19	+21	+25	+25	+25	+21	+19	+18	+14	+12	+14	+16	+17	+15	+16	+19	+18	+15	+9	+7	B		
35	A	+14	-17	-16	-8	-31	-41	-41	-48	-45	-51	-64	-81	-93	-87	-87	-84	-76	-62	-45	-26	-30	-37	-26	-15	-7	+11	A		
	B	+30	+31	+28	+31	+27	+27	+28	+29	+34	+32	+32	+28	+29	+30	+24	+21	+19	+22	+22	+22	+25	+27	+24	+20	+15	+14	B		
36	A	+19	-15	-13	-3	-29	-38	-36	-45	-44	-49	-60	-78	-89	-81	-81	-80	-74	-57	-40	-22	-28	-34	-24	-13	-4	+13	A		
	B	+26	+31	+30	+31	+29	+30	+30	+30	+36	+34	+32	+27	+27	+28	+24	+22	+20	+22	+22	+22	+25	+26	+24	+20	+17	+17	B		
37	A	+23	-14	-13	-2	-27	-34	-32	-43	-43	-49	-58	-74	-87	-77	-76	-78	-72	-55	-38	-23	-31	-34	-22	-11	-3	+14	A		
	B	+10	+16	+17	+18	+15	+14	+16	+18	+22	+22	+18	+13	+14	+14	+12	+8	+7	+9	+10	+13	+14	+13	+12	+12	+10	+10	B		
38	A	+29	-5	-3	+5	-21	-30	-27	-36	-36	-42	-50	-67	-82	-74	-73	-72	-63	-51	-34	-17	-24	-27	-15	-4	+3	+20	A		
	B	+9	+11	+13	+18	+14	+12	+16	+16	+18	+19	+18	+14	+12	+12	+11	+8	+6	+9	+10	+12	+12	+10	+8	+9	+6	+6	B		
39	A	+35	+1	0	+9	-15	-24	-22	-31	-30	-36	-44	-62	-77	-70	-71	-67	-57	-44	-30	-13	-16	-21	-10	+2	+8	+24	A		
	B	+30	+31	+30	+33	+32	+32	+34	+32	+36	+36	+36	+33	+30	+29	+24	+22	+24	+29	+28	+27	+27	+28	+27	+24	+20	+21	B		
40	A	+42	+7	+3	+13	-9	-18	-19	-27	-23	-30	-40	-59	-73	-66	-65	-59	-50	-36	-23	-8	-12	-17	-3	+9	+13	+30	A		
	B	+38	+42	+39	+39	+39	+42	+43	+40	+46	+48	+45	+42	+39	+38	+34	+32	+34	+38	+38	+36	+38	+41	+38	+33	+28	+27	B		
41	A	+45	+12	+9	+17	-5	-14	-14	-23	-22	-29	-38	-57	-71	-65	-62	-57	-50	-33	-18	-3	-8	-13	+1	+12	+17	+33	A		
	B	+51	+53	+51	+51	+48	+50	+52	+52	+56	+58	+57	+53	+52	+51	+50	+49	+48	+49	+50	+51	+51	+49	+47	+45	+41	+38	B		
42	A	+48	+15	+17	+24	0	-10	-7	-15	-18	-27	-33	-51	-68	-60	-59	-55	-50	-33	-14	+1	-2	-6	+5	+14	+18	+36	A		
	B	+57	+60	+57	+56	+54	+57	+58	+58	+63	+66	+64	+59	+60	+60	+58	+55	+53	+56	+59	+58	+57	+54	+53	+52	+50	+48	B		
43	A	+53	+19	+23	+32	+7	-4	-2	-10	-12	-22	-29	-47	-63	-56	-54	-51	-43	-26	-8	+6	+1	-3	+7	+17	+21	+38	A		
	B	+55	+58	+54	+54	+54	+60	+60	+57	+64	+67	+62	+58	+60	+58	+56	+53	+51	+56	+57	+54	+54	+54	+53	+49	+46	+44	B		
44	A	+59	+25	+29	+39	+14	+2	0	-8	-7	-15	-26	-44	-58	-51	-50	-47	-36	-18	-3	+8	+3	+2	+12	+21	+27	+43	A		
	B	+53	+54	+51	+52	+52	+54	+55	+52	+58	+61	+59	+57	+56	+54	+51	+48	+48	+48	+52	+51	+48	+48	+49	+49	+46	+41	+36	B	
45	A	+65	+32	+33	+41	+17	+8	+7	-2	0	-10	-20	-38	-51	-44	-45	-42	-32	-16	-1	+11	+8	+7	+17	+25	+31	+48	A		
	B	+38	+40	+37	+38	+36	+36	+40	+39	+44	+48	+46	+43	+41	+40	+38	+35	+35	+38	+38	+36	+37	+38	+37	+34	+29	+26	B		
46	A	+70	+38	+39	+45	+21	+15	+14	+3	+3	-5	-14	-32	-47	-40	-42	-39	-30	-15	0	+15	+10	+8	+19	+27	+35	+52	A		
	B	+22	+25	+22	+24	+21	+22	+26	+26	+32	+34	+29	+25	+27	+28	+23	+20	+17	+20	+21	+19	+20	+19	+18	+14	+10	+8	B		
47	A	+76	+45	+47	+55	+33	+22	+22	+10	+8	+1	-8	-25	-40	-33	-35	-31	-22	-7	+9	+22	+16	+13	+24	+34	+42	+58	A		
	B	+8	+10	+10	+10	+8	+9	+12	+11	+16	+20	+17	+12	+13	+14	+10	+9	+6	+10	+9	+7	+8	+7	+8	+5	-1	-3	B		
48	A	+84	+51	+54	+63	+39	+29	+28	+16	+15	+6	-3	-21	-33	-29	-31	-28	-20	-1	+16	+26	+22	+20	+28	+39	+48	+61	A		
	B	-6	-3	-2	0	-2	-4	-1	-2	+2	+6	+5	+2	+2	+2	+2	+2	0	+5	+4	+2	+4	+5	+6	+3	0	-2	B		
49	A	+91	+59	+61	+69	+43	+36	+36	+24	+23	+14	+3	-17	-29	-24	-27	-24	-19	+1	+20	+30	+28	+27	+35	+45	+53	+67	A		
	B	-14	-12	-14	-11	-12	-13	-9	-8	-6	-3	-6	-7	-6	-7	-8	-9	-10	-5	-6	-8	-5	-2	-2	-3	-5	-6	B		
50	A	+98	+65	+67	+75	+51	+43	+44	+32	+30	+21	+10	-11	-25	-17	-17	-17	-12	+7	+25	+38	+37	+35	+41	+51	+59	+75	A		
	B	-37	-36	-38	-38	-39	-37	-33	-32	-30	-26	-26	-28	-29	-32	-33	-34	-36	-32	-30	-29	-28	-28	-28	-29	-32	-30	B		
51	A	+104	+71	+71	+80	+59	+49	+49	+39	+36	+26	+14	-7	-21	-12	-12	-11	-4	+14	+30	+44	+43	+40	+45	+55	+60	+77	A		
	B	-56	-54	-54	-53	-54	-53	-51	-51	-45	-41	-41	-43	-43	-42	-44	-47	-48	-45	-44	-43	-44	-45	-44	-46	-48	-48	B		
52	A	+110	+78	+78	+87	+65	+55	+55	+44	+40	+30	+21	0	-15	-5	-7	-4	+2	+17	+35	+49	+45	+42	+49	+60	+65	+81	A		
	B	-59	-56	-55	-51	-54	-53	-51	-51	-45	-43	-45	-47	-45	-43	-46	-49	-49	-47	-48	-47	-45	-45	-45	-48	-50	-51	B		
53	A	+115	+84	+83	+93	+72	+61	+58	+46	+45	+36	+27	+6	-8	+1	-3	-2	+7	+24	+41	+52	+48	+45	+53	+63	+70	+86	A		
	B	-62	-57	-56	-51	-54	-55	-51	-51	-46	-44	-44	-46	-46	-46	-48	-48	-51	-49	-48	-46	-44	-42	-43	-47	-47	-48	B		
54	A	+122	+89	+89	+101	+77	+66	+65	+54	+52	+41	+30	+11	-3	+5	+2	+4	+13	+32	+48	+59	+54	+51	+59	+69	+73	+89	A		
	B	-61	-57	-57	-54	-56	-57	-52	-50	-46	-43	-42	-45	-47	-47	-48	-49	-49	-45	-45	-46	-45	-42	-43	-45	-47	-47	B		
55	A	+130	+97	+98	+109	+82	+71	+74	+64	+58	+46	+34	+15	+3	+12	+8	+10	+17	+36	+53	+65	+61	+56	+64	+75	+79	+94	A		
	B	-52	-50	-51	-49	-52	-52	-47	-44	-39	-37	-38	-42	-44	-44	-47	-48	-45	-41											

The above corrections are those to be applied to the reduced distances from the centre. The x -co-ordinate (R.A.—the A. system, lines 1 to 27) increases with increasing réseau numbers, and the y -co-ordinate (dec.—the B. system, lines 30 to 56) decreases with increasing réseau numbers.

+ corresponds to increasing R.A. and to increasing N. declination.

TABLE OF CORRECTIONS.

RÉSEAU MELBOURNE No. 6.

Unit '0001 mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
30	A	-42	+10	+5	-2	-13	-14	-22	-35	-45	-52	-42	-34	-37	-36	-27	-24	-18	-10	-5	+2	+13	+17	+10	+13	+28	+30	A	30
	B	+29	+29	+24	+16	+9	+14	+16	+16	+21	+23	+20	+18	+21	+26	+32	+23	+14	+15	+19	+21	+21	+22	+22	+24	+30	+42	B	
31	A	-26	+11	-1	0	-9	-14	-22	-32	-41	-49	-44	-35	-35	-33	-27	-27	-19	-7	-7	-1	+11	+17	+11	+11	+24	+26	A	31
	B	+22	+25	+20	+13	+12	+17	+16	+15	+15	+14	+14	+14	+14	+11	+12	+15	+14	+13	+18	+20	+19	+21	+22	+24	+28	+36	B	
32	A	-18	+12	+1	+1	-8	-18	-25	-28	-37	-49	-45	-37	-34	-31	-27	-28	-19	-7	-7	0	+14	+17	+8	+8	+26	+30	A	32
	B	+26	+25	+18	+14	+14	+16	+16	+16	+10	+10	+12	+14	+16	+13	+12	+11	+8	+10	+17	+17	+16	+16	+22	+28	+31	+37	B	
33	A	-25	+12	+1	-6	-12	-18	-26	-32	-40	-49	-43	-39	-40	-35	-30	-27	-18	-10	-5	+2	+9	+13	+9	+8	+26	+30	A	33
	B	+25	+25	+18	+14	+13	+16	+16	+12	+9	+13	+14	+17	+11	+8	+13	+12	+9	+12	+18	+18	+19	+19	+25	+30	+33	+42	B	
34	A	-26	+14	+1	-6	-12	-17	-24	-34	-44	-52	-45	-39	-45	-38	-28	-26	-18	-9	-4	+2	+8	+12	+11	+10	+24	+31	A	34
	B	+12	+16	+14	+9	+3	+5	+12	+8	+5	+10	+10	+11	+4	+2	+7	+6	+5	+11	+15	+14	+20	+20	+20	+27	+32	+37	B	
35	A	-25	+20	+8	0	-9	-14	-21	-32	-42	-50	-46	-34	-39	-37	-28	-28	-18	-8	-4	-2	+6	+15	+12	+12	+26	+33	A	35
	B	+13	+12	+9	+6	-4	-4	+6	+5	0	+1	-1	-4	-5	-3	-3	-6	-5	-1	0	0	+8	+11	+12	+19	+22	+24	B	
36	A	-22	+27	+10	-1	-6	-10	-20	-31	-40	-48	-44	-33	-34	-38	-35	-32	-18	-7	-4	-4	+2	+15	+12	+10	+28	+35	A	36
	B	0	-5	-8	-12	-21	-19	-14	-14	-16	-18	-21	-20	-21	-20	-21	-26	-26	-24	-22	-25	-20	-10	-5	-6	-5	+2	B	
37	A	-21	+32	+15	+4	-4	-9	-20	-28	-36	-45	-41	-35	-37	-37	-34	-30	-19	-6	-1	+2	+8	+18	+17	+15	+32	+36	A	37
	B	-28	-30	-29	-33	-39	-39	-37	-38	-37	-40	-45	-40	-40	-40	-38	-43	-40	-36	-34	-34	-31	-28	-28	-26	-22	-14	B	
38	A	-19	+28	+16	+8	-4	-9	-18	-28	-33	-41	-40	-37	-41	-38	-34	-30	-16	-5	0	+4	+13	+23	+18	+14	+32	+36	A	38
	B	-28	-28	-29	-32	-36	-38	-38	-40	-42	-42	-46	-43	-41	-44	-43	-42	-36	-36	-37	-36	-35	-37	-36	-29	-25	-18	B	
39	A	-19	+25	+15	+8	-4	-8	-20	-33	-37	-41	-38	-37	-43	-39	-34	-30	-13	0	+4	+8	+15	+22	+14	+12	+32	+38	A	39
	B	-38	-34	-33	-36	-38	-40	-43	-46	-45	-45	-46	-45	-48	-52	-48	-46	-46	-46	-44	-47	-50	-46	-47	-45	-38	-28	B	
40	A	-33	+24	+14	+9	-3	-6	-16	-32	-38	-42	-38	-35	-40	-38	-31	-25	-10	+3	+4	+8	+16	+20	+15	+15	+32	+39	A	40
	B	-49	-46	-44	-48	-52	-51	-54	-58	-55	-54	-63	-67	-73	-78	-67	-60	-59	-56	-54	-58	-58	-54	-57	-57	-50	-41	B	
41	A	-49	+22	+13	+7	-6	-9	-15	-30	-37	-41	-41	-38	-44	-40	-33	-24	-9	0	0	+4	+12	+18	+18	+16	+29	+37	A	41
	B	-44	-47	-45	-49	-57	-58	-57	-58	-60	-60	-68	-74	-80	-85	-76	-68	-64	-64	-63	-65	-64	-58	-58	-56	-54	-48	B	
42	A	-49	+23	+15	+6	-5	-10	-19	-30	-34	-39	-40	-39	-45	-37	-29	-26	-12	0	+1	+5	+12	+18	+20	+18	+29	+38	A	42
	B	-39	-40	-39	-43	-50	-51	-49	-49	-53	-54	-54	-59	-63	-63	-60	-58	-56	-57	-59	-60	-58	-53	-50	-47	-42	-36	B	
43	A	-46	+25	+16	+8	-5	-10	-18	-28	-32	-38	-37	-36	-41	-34	-27	-23	-10	+1	+3	+10	+16	+21	+23	+21	+34	+42	A	43
	B	-29	-28	-30	-37	-42	-38	-34	-36	-38	-39	-44	-47	-46	-44	-44	-45	-44	-43	-45	-49	-48	-46	-44	-38	-31	-26	B	
44	A	-44	+28	+18	+7	-6	-10	-16	-26	-33	-36	-32	-30	-34	-31	-24	-16	-4	+4	+10	+16	+21	+26	+25	+24	+38	+42	A	44
	B	-22	-21	-24	-30	-33	-30	-27	-28	-30	-32	-36	-34	-34	-36	-36	-37	-36	-33	-34	-39	-37	-37	-37	-30	-24	-18	B	
45	A	-43	+30	+20	+6	-9	-12	-16	-24	-32	-35	-28	-24	-30	-30	-22	-14	-2	+14	+16	+16	+22	+31	+28	+24	+40	+42	A	45
	B	-16	-14	-18	-22	-24	-25	-26	-27	-27	-28	-32	-30	-28	-32	-34	-31	-30	-28	-25	-28	-30	-29	-29	-26	-22	-17	B	
46	A	-38	+32	+22	+11	-7	-10	-15	-26	-31	-34	-29	-26	-31	-28	-21	-16	-1	+15	+15	+16	+22	+31	+32	+28	+42	+43	A	46
	B	-19	-15	-18	-22	-26	-26	-28	-31	-31	-34	-40	-39	-32	-33	-34	-31	-31	-33	-31	-32	-34	-30	-28	-28	-26	-20	B	
47	A	-39	+29	+18	+10	-6	-10	-18	-30	-33	-34	-30	-28	-31	-27	-21	-16	-4	+9	+11	+17	+24	+30	+30	+28	+42	+45	A	47
	B	-21	-12	-12	-21	-28	-27	-29	-32	-35	-36	-40	-42	-38	-38	-36	-34	-33	-37	-38	-36	-33	-32	-32	-30	-26	-20	B	
48	A	-18	+27	+17	+8	-7	-11	-19	-30	-32	-30	-24	-26	-32	-28	-19	-12	-1	+12	+16	+20	+26	+32	+33	+31	+44	+48	A	48
	B	-16	-10	-10	-20	-24	-24	-28	-30	-31	-29	-31	-34	-36	-37	-34	-33	-33	-31	-29	-28	-27	-28	-28	-26	-21	-16	B	
49	A	-38	+34	+20	+10	-2	-5	-15	-26	-28	-26	-21	-24	-30	-26	-16	-5	+8	+17	+20	+25	+30	+38	+38	+35	+48	+49	A	49
	B	-13	-8	-11	-18	-18	-18	-22	-24	-28	-27	-26	-26	-28	-29	-25	-25	-26	-23	-19	-20	-22	-20	-16	-15	-12	-6	B	
50	A	-34	+39	+24	+14	+2	-2	-12	-21	-20	-20	-20	-21	-26	-20	-13	-3	+14	+20	+20	+25	+31	+40	+41	+38	+51	+52	A	50
	B	-3	+3	-1	-7	-9	-8	-8	-12	-16	-16	-18	-16	-14	-16	-14	-14	-14	-14	-11	-14	-12	-7	-7	-6	-5	+2	B	
51	A	-28	+40	+28	+18	+4	0	-6	-16	-16	-16	-19	-22	-27	-17	-11	-5	+14	+23	+22	+27	+36	+43	+44	+41	+54	+56	A	51
	B	+6	+10	+4	-2	-5	-4	-2	-6	-6	-7	-11	-10	-10	-12	-10	-12	-11	-8	-6	-10	-6	-3	-6	-3	-1	+6	B	
52	A	-14	+40	+27	+17	+5	+2	-6	-16	-16	-20	-22	-24	-26	-15	-8	-5	+12	+22	+22	+31	+42	+47	+45	+41	+55	+56	A	52
	B	+9	+12	+5	-2	-6	-4	-2	-3	-4	-4	-7	-6	-8	-10	-6	-8	-8	-4	-2	-3	0	+1	0	+4	+7	+10	B	
53	A	-12	+39	+30	+20	+7	+3	-5	-12	-13	-16	-20	-21	-22	-14	-4	-1	+13	+24	+26	+34	+42	+50	+50	+44	+57	+58	A	53
	B	+21	+25	+24	+17	+11	+12	+17	+17	+17	+17	+12	+11	+12	+11	+13	+12	+11	+13	+14	+13	+16	+18	+18	+23	+25	+27	B	
54	A	-16	+36	+30	+22	+5	+5	0	-9	-12	-14	-17	-19	-23	-15	-4	+1	+15	+26	+27	+33	+41	+51	+53	+48	+60	+63	A	54
	B	+45	+48	+49	+42	+36	+35	+38	+38	+35	+34	+30	+29	+30	+30	+30	+30	+30	+30	+30	+30	+32	+34	+37	+42	+41	+46	B	
55	A	-9	+39	+31	+21	+8	+8	+4	-8	-12	-12	-12	-14	-18	-8	+2	+8	+20	+28	+32	+37	+44	+52	+52	+51	+63	+74	A	55
	B	+54	+56	+54	+47	+42	+39	+41	+38	+36	+37	+32	+32	+33	+33	+32	+29	+29	+32	+36	+36	+36	+40	+43	+47	+45			

The above corrections are those to be applied to the reduced distances from the centre. The x -co-ordinate (R.A.—the A. system, lines 1 to 27) increases with increasing réseau numbers, and the y -co-ordinate (dec.—the B. system, lines 30 to 56) decreases with increasing réseau numbers.

+ corresponds to increasing R.A. and to increasing N. declination.

TABLE OF CORRECTIONS.

RÉSEAU GAUTIER No. 33.

Unit '0001 mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
30	A	-25	-11	-10	-10	-6	-5	-10	-10	-13	-13	-4	0	-4	-4	0	+4	+4	+3	+6	+4	-11	-7	-8	-8	-2	-14	A	30
	B	+9	+10	+11	+15	+12	+12	+15	+12	+16	+17	+14	+20	+22	+17	+21	+19	+16	+18	+16	+17	+18	+16	+11	(+8)	(+12)	+18	B	31
31	A	-22	-6	-5	-6	+1	+1	-2	-4	-8	-7	+2	+3	-2	+2	+8	+8	+9	+10	+14	+8	-7	-1	-2	-6	+1	-10	A	31
	B	+8	+12	+9	+8	+6	+4	+5	+6	+8	+8	+8	+12	+12	+7	+11	+12	+8	+7	+6	+9	+8	+1	-1	-3	0	(+6)	B	32
32	A	-22	-7	-5	-7	-2	0	-2	-3	-7	-9	0	+4	-3	-1	+8	+11	+11	+12	+14	+7	-8	0	-1	-8	-2	-10	A	32
	B	+3	+5	+5	+7	+4	+2	+1	+2	+1	0	+4	+8	+8	+4	+6	+6	+4	+3	+4	+7	+4	-2	-3	-4	-2	(+3)	B	33
33	A	-22	-11	-12	-11	-2	0	-4	-4	-7	-12	-2	+3	-1	0	+6	+11	+10	+8	+10	+8	-6	-2	-3	-9	-4	-8	A	33
	B	-5	-5	-3	+4	0	-2	0	-2	-2	-4	-1	+3	+2	0	+4	+6	+4	+3	+3	+6	+8	+4	+1	-4	-2	+4	B	34
34	A	-22	-13	-15	-11	0	+4	-2	-4	-9	-14	-4	0	-3	0	+4	+6	+4	+6	+11	+9	-5	-4	-6	-12	-8	-10	A	34
	B	-8	-7	-8	-3	-4	-4	-2	-6	-7	-7	-7	-3	-2	-6	-1	0	-5	-4	-3	-2	0	-5	-7	-9	-8	-2	B	35
35	A	-20	-11	-11	-11	-4	+1	-4	-6	-11	-13	-4	-1	-4	-2	+2	+5	+4	+6	+11	+5	-8	-4	-6	-12	-10	-10	A	35
	B	-10	-6	-8	-4	-3	-3	-3	-6	-6	-8	-8	-4	-1	-4	-3	-2	-5	-2	-2	-2	-4	-9	-10	-10	-10	-4	B	36
36	A	-17	-10	-11	-12	-7	-2	-6	-4	-7	-11	-1	+2	-2	-1	+1	+6	+7	+6	+9	+6	-8	-4	-4	-12	-8	-8	A	36
	B	-6	0	+1	+6	+5	+2	+3	+3	+4	+1	+2	+4	+3	-2	+3	+6	+6	+8	+6	+8	+8	0	-4	-4	-2	+4	B	37
37	A	-17	-7	-8	-12	-7	-1	-3	-2	-8	-12	-3	+2	+1	+3	+5	+8	+8	+5	+8	+6	-8	-2	-3	-10	-7	-9	A	37
	B	-4	0	0	+6	+4	+1	+3	+3	+4	+4	+4	+4	0	-2	+4	+6	+6	+10	+7	+7	+8	+1	-3	-3	-2	+4	B	38
38	A	-18	-6	-7	-12	-6	0	-2	-3	-10	-12	-3	0	0	+4	+8	+10	+10	+6	+6	+4	-10	-2	-4	-9	-6	-10	A	38
	B	+1	+5	+5	+10	+7	+4	+8	+8	+9	+8	+6	+7	+7	+6	+11	+8	+7	+12	+10	+9	+8	+4	+2	0	-1	+8	B	39
39	A	-18	-9	-12	-13	-6	-4	-10	-9	-13	-14	-3	-1	-3	+1	+4	+6	+6	+2	+3	+2	-10	-6	-9	-14	-11	-14	A	39
	B	-1	+4	+7	+15	+11	+8	+11	+9	+9	+8	+7	+10	+12	+10	+12	+10	+12	+16	+14	+13	+11	+9	+8	+2	+2	+10	B	40
40	A	-18	-8	-13	-15	-8	-7	-12	-12	-15	-16	-2	+2	-2	-1	+1	+6	+7	0	+3	+4	-10	-6	-6	-11	-10	-12	A	40
	B	-6	-2	0	+8	+7	+6	+6	+3	+5	+5	+2	+6	+8	+4	+4	+6	+9	+12	+9	+11	+12	+10	+7	-1	-1	+5	B	41
41	A	-17	-6	-10	-12	-5	-3	-8	-8	-10	-8	+4	+5	+2	+4	+5	+8	+10	+5	+8	+7	-6	-2	-2	-6	-4	-6	A	41
	B	-6	0	+2	+6	+2	+1	+4	+3	+4	+3	0	+4	+4	-1	+1	+5	+5	+8	+8	+9	+12	+5	+1	0	0	+4	B	42
42	A	(-12)	(-6)	-9	-9	-4	-2	-6	-5	(-6)	(-5)	+4	+4	+3	+7	+10	+10	+11	+8	+10	+9	-2	+1	-2	-7	-4	-6	A	42
	B	-6	-2	0	+3	0	0	+4	+2	-1	-4	-2	+4	+3	-1	+2	+4	+4	+8	+7	+8	+8	-1	-4	-2	-1	+6	B	43
43	A	(-14)	(-6)	-9	-13	-7	-2	-5	-3	(-7)	(-10)	+2	+4	+2	+6	+8	+9	+9	+7	+8	+8	-5	-2	-2	-8	-5	-8	A	43
	B	-7	-5	-5	+3	+2	-3	-2	-3	-7	-10	-5	0	-1	-2	+1	-1	-2	-2	-2	0	-2	-8	-10	-10	-10	-2	B	44
44	A	-15	-3	-8	-15	-8	0	-3	0	-4	-9	+3	+7	+3	+5	+7	+8	+7	+6	+8	+6	-8	-6	-1	-8	-9	-9	A	44
	B	-7	-3	-4	+4	+6	-2	-6	-6	-6	-6	-3	+2	+2	-1	+1	+1	0	-2	-2	+3	+2	-4	-6	-6	-6	+2	B	45
45	A	-10	0	-6	-10	-4	+1	-1	+2	-2	-8	0	+5	+4	+3	+5	+10	+11	+10	+8	+8	-4	-2	+2	-8	-13	-9	A	45
	B	-14	-8	-8	-7	-6	-6	-9	-10	-9	-9	-8	-2	+1	-4	-2	-1	-4	-6	-4	0	0	-3	-6	-8	-4	+6	B	46
46	A	(-7)	0	(-4)	(-7)	-2	+1	-2	+1	-3	-8	-1	0	+2	+4	+6	+10	+14	+13	+10	+7	-4	-3	0	-6	-9	-11	A	46
	B	-15	(10)	(-20)	(-19)	-21	-18	-16	-15	-15	-16	-13	-8	-9	-12	-10	-11	-13	-14	-12	-10	-10	-12	-16	-20	-16	-4	B	47
47	A	(-8)	(-2)	(-4)	(-8)	-3	+1	-3	0	-4	-13	-4	-2	-2	+2	+5	+7	+8	+8	+7	+5	-9	-6	-4	-10	-10	-16	A	47
	B	-12	(-8)	(-20)	(-16)	-14	-16	-14	-12	-12	-14	-10	-4	-4	-10	-10	-8	-8	-8	-8	-5	-6	-9	-11	-16	-16	-6	B	48
48	A	-12	(-4)	(-4)	-7	-4	0	-2	-2	-7	-16	-9	-4	-3	-1	+1	+4	+6	+4	+3	+2	-9	-6	-4	-11	-13	-16	A	48
	B	-9	(-11)	(-13)	-8	-6	-8	-8	-9	-8	-9	-7	-2	-1	-9	-11	-8	-6	-8	-7	-4	-5	-6	-8	-13	-11	-2	B	49
49	A	-12	-5	-4	-5	-4	-2	-6	-5	-6	-13	-8	-2	-2	+1	+2	+4	+8	+5	+4	+4	-9	-6	-3	-10	-11	-10	A	49
	B	-10	-11	-10	-6	-8	-12	-11	-10	-10	-9	-10	-6	-6	-10	-6	-4	-6	-7	-10	-8	-4	-6	-8	-10	-9	0	B	50
50	A	-6	-2	-2	-5	-4	-1	-6	0	0	-8	-1	+3	+1	+4	+3	+4	+9	+6	+7	+8	-6	-4	0	-7	-9	-7	A	50
	B	-6	-1	0	+2	-3	-7	-4	0	0	-2	-2	+4	+4	0	+5	+9	+7	+5	0	+2	+7	+6	+2	0	0	+9	B	51
51	A	-7	0	-3	-7	-4	-2	-6	+2	+2	-6	+4	+4	+1	+4	+4	+6	+8	+6	+6	+8	-13	-15	-5	-8	-10	-8	A	51
	B	-7	+1	+2	+2	-3	-3	(+1)	(0)	-1	-2	-1	+4	+3	0	+1	+2	+3	+3	+1	+2	+6	+3	-1	-2	-1	+6	B	52
52	A	-10	-4	-7	-10	-4	-1	-8	0	0	-7	+4	+4	+1	+4	+2	+5	(+8)	(+7)	+10	+11	-14	(-19)	(-5)	-12	-14	-6	A	52
	B	-6	+2	+3	+1	0	0	(+2)	(0)	-3	-3	-2	0	-1	-3	-1	-2	0	+3	-2	-1	+3	(0)	(-4)	-2	-2	0	B	53
53	A	-7	-4	-12	-16	-4	0	-7	0	-3	-8	+3	+2	+1	+2	-1	+6	(+10)	(+7)	+12	+12	-8	(-8)	(-1)	-10	-14	-4	A	53
	B	-6	(+4)	(+8)	+7	+4	+2	+4	+5	+6	+2	+2	+9	+6	+1	+4	+4	+8	+14	+9	+10	+13	(+10)	(+6)	+5	+5	+8	B	54
54	A	+10	-6	-12	-13	-1	+1	-5	0	-4	-9	0	+1	+3	+5	+3	+8	+12	+7	+10	+11	-5	-4	0	-6	-8	-8	A	54
	B	-4	(+6)	(+10)	+14	+7	0	+6	+8	+10	+6	+7	+11	+10	+4	+5	+7	+8	+14	+16	+15	+16	+12	+10	+6	+4	+14	B	55
55	A	+10	0	0	-2	+2	+6	+3	+6	+1	-5	+5	+8	+7	+10	+9	+11	+15	+11	+12	+17	+2	0	+5	0	-2	-5	A	55
	B	0	+5	+6	+11	+5	-2	+3	+4	+4	+3	+4	+5	+6	+4	+3	+5	+4	+3	+6	+8	+8	+6	+2	0	-2	+9	B	56
56																													56

The above corrections are those to be applied to the reduced distances from the centre. The x -co-ordinate (R.A.—the A system, lines 1 to 27) increases with increasing réseau numbers, and the y -co-ordinate (dec.—the B system, lines 30 to 56) decreases with increasing réseau numbers.

+ corresponds to increasing R.A. and to increasing N. declination.

TABLE OF CORRECTIONS.

RÉSEAU MELBOURNE No. 11.

Unit '0001 mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
30																												30
	A	+100	+91	+84	+59	+57	+52	+32	+43	+34	+27	+53	+69	+51	+41	+46	+38	+16	+26	+44	+28	+28	+46	+56	+65	+60	+56	A
	B	-12	-3	-2	-5	0	+4	0	+4	+1	-5	-4	+2	+3	+2	+5	+8	+2	+4	+7	-5	-6	+2	+1	-2	-4	-18	B
31	A	+101	+90	+82	+57	+56	+50	+32	+43	+33	+26	+52	+68	+53	+45	+46	+38	+16	+25	+44	+26	+25	+41	+54	+62	+58	+58	A
	B	-18	-6	-7	-12	-14	-8	-1	+2	0	-2	-2	+2	+4	+6	+12	+14	+9	+10	+12	+4	+1	+2	0	-3	-6	-22	B
32	A	+98	+86	+79	+56	+52	+43	+30	+42	+28	+20	+45	+64	+50	+39	+41	+37	+19	+26	+39	+22	+22	+34	+55	+66	+54	+49	A
	B	-13	-2	+1	-4	-7	0	+3	+3	0	+1	+8	+14	+8	+9	+14	+12	+10	+13	+19	+16	+14	+8	+3	-2	-7	-16	B
33	A	+94	+81	+76	+51	+44	+34	+24	+37	+24	+12	+33	+56	+42	+28	+32(+32)	(+16)	+20	+32	+16	+15	+27	+46	+57	+46	+40	A	
	B	-2	+1	+4	+3	+2	+6	+8	+6	+4	+6	+16	+20	+14	+14	+14	+12	+14	+15	+20	+23	+20	+12	+7	0	-6	-10	B
34	A	+84	+75	+72	+45	+36	+24	+19	+36	+24	+10	+24	+46	+32	+18	+25(+29)	(+11)	+14	+27	+11	+12	+23	+31	+42	+39	+34	A	
	B	+4	+4	+2	+1	+1	+6	+8	+4	+6	+6	+11	+16	+15	+11	+11	+12	+13	+10	+14	+18	+16	+11	+4	-6	-10	-16	B
35	A	+80	+69	+66	+37	+26	+18	+18	+33	+26	+12	+23	+45	+29	+16	+26	+32	+12	+14	+26	+8	+9	+21	+28	+39	+36	+26	A
	B	+11	+15	+16	+12	+11	+15	+16	+16	+16	+11	+9	+14	+16	+10	+12	+15	+16	+15	+17	+20	+20	+18	+10	+3	+2	-8	B
36	A	+77	+65	+62	+33	+23	+16	+11	+28	+26	+12	+22	+45	+30	+19	+26	+28	+6	+10	+25	+5	+5	+18	+30	+41	+34	+19	A
	B	+20	+26	+31	+31	+30	+28	+26	+30	+31	+22	+22	+26	+31	+26	+26	+27	+26	+30	+31	+32	+32	+30	+25	+20	+25	+11	B
37	A	+73	+61	+58	+31	+23	+12	+1	+16	+19	+7	+16	+39	+28	+16	+20	+20	-3	+3	+18	-4	-2	+18	+34	+40	+27	+12	A
	B	+8	+13	+17	+18	+18	+17	+16	+22	+22	+14	+15	+24	+25	+19	+21	+18	+16	+20	+26	+26	+20	+16	+14	+10	+12	-2	B
38	A	+72	+62	+56	+28	+24	+13	0	+12	+13	+4	+14	+34	+23	+13	+18	+16	-6	-1	+11	-7	-4	+18	+36	+38	+24	+12	A
	B	+11	+15	+16	+13	+10	+8	+10	+22	+25	+16	+9	+16	+20	+18	+22	+19	+16	+17	+22	+21	+16	+8	+7	+4	0	-8	B
39	A	+68	+61	+55	+22	+21	+9	-9	+6	+7	-2	+9	+28	+18	+9	+15	+10	-12	-5	+10	-5	-4	+14	+32	+40	+28	+14	A
	B	+15	+20	+22	+20	+18	+16	+17	+22	+27	+20	+13	+16	+23	+26	+26	+26	+25	+24	+21	+20	+23	+17	+15	+13	+8	+2	B
40	A	+63	+55	+47	+17	+16	-1	-18	-1	-2	-15	-3	+21	+10	0	+10	+8	-17	-11	+8	-8	-5	+14	+27	+42	+32	+8	A
	B	+9	+12	+16	+18	+18	+22	+20	+20	+24	+20	+16	+18	+25	+23	+26	+30	+27	+22	+25	+28	+24	+21	+22	+17	+10	+3	B
41	A	+61	+51	+42	+14	+12	-5	-21	-5	-10	-24	-8	+21	+8	-2	+8	+4	-20	-16	+2	-10	-8	+10	+23	+40	+27	-3	A
	B	+9	+11	+12	+10	+10	+13	+15	+20	+24	+16	+13	+20	+27	+23	+25	+32	+26	+23	+32	+31	+22	+22	+23	+16	+9	+5	B
42	A	+58	+44	+36	+7	+4	-10	-25	-12	-15	-26	-11	+17	+6	-4	+4	-4	-30	-25	-9	-19	-16	+5	+19	+35	+19	-6	A
	B	+11	+19	+23	+20	+17	+17	+20	+26	+27	+15	+18	+26	+26	+26	+27	+30	+28	+27	+33	+32	+27	+26	+23	+17	+16	+11	B
43	A	+48	+33	+22	-6	-8	-22	-34	-20	-20	-33	-24	+1	-5	-13	-11	-14	-35	-36	-20	-28	-24	-3	+13	+30	+17	-5	A
	B	+12	+19	+23	+27	+28	+22	+25	+33	+28	+19	+22	+26	+28	+28	+34	+32	+20	+24	+32	+31	+28	+24	+20	+18	+19	+10	B
44	A	+40	+25	+12	-12	-12	-30	-43	-27	-31	-42	-33	-11	-18	-22	-17	-19	-40	(-44)	(-26)	-35	-32	-13	+4	+22	+16	-4	A
	B	+6	+6	+8	+13	+15	+12	+17	+26	+19	+13	+17	+22	+26	+21	+24	+24	+15	+22	+28	+22	+21	+18	+12	+14	+14	+3	B
45	A	+32	+18	+9	-16	-10	-30	-49	-31	-39	-50	-38	-19	-28	-32	-24	-28	-47	(-46)	(-33)	-48	-43	-17	-1	+12	+8	-6	A
	B	-14	-14	-13	-11	-12	-10	-3	+2	-2	-8	-6	0	+4	+2	+5	+8	+5	+7	+10	+7	+5	-1	-4	-4	-6	-19	B
46	A	+18	+4	-5	-28	-17	-34	-60	-45	-50	-60	-48	-29	-39	-48	-42	-43	-60	-57	-43	-56	-56	-27	-10	+1	-7	-20	A
	B	-37	-37	-35	-31	-28	-24	-19	-17	-22	-27	-28	-26	-22	-19	-12	-10	-17	-21	-20	-21	-23	-24	-23	-24	-26	-41	B
47	A	+8	-7	-13	-36	-32	-49	-68	-52	-53	-66	-56	-33	-46	-53	-48	-52	-71	-66	-44	-56	-61	-37	-22	-10	-16	-29	A
	B	-15	-13	-9	-6	-2	0	0	+1	0	-2	-4	-5	-3	-2	+5	+8	-1	-5	0	+4	+3	+3	+2	+1	-1	-12	B
48	A	+9	-4	-11	-34	-40	-58	-67	-48	-52	-69	-54	-30	-42	-46	-44	-54	-72	-65	-44	-57	-60	-35	-22	-17	-21	-32	A
	B	+30	+35	+37	+37	+38	+39	+40	+40	+38	+36	+39	+42	+42	+40	+46	+48	+41	+41	+47	+49	+48	+46	+42	+38	+34	+26	B
49	A	+9	-4	-16	-37	-39	-59	-72	-54	-57	-72	-54	-30	-42	-50	-49	-56	-73	-64	-48	-62	-63	-38	-27	-19	-23	-37	A
	B	+16	+19	+22	+23	+20	+22	+26	+27	+24	+23	+26	+26	+26	+24	+29	+31	+28	+26	+24	+24	+24	+20	+18	+14	+12	+2	B
50	A	+2	-6	-16	-39	-38	-56	(-72)	(-56)	-59	-71	-56	-36	-48	-58	-53	-56	-72	-63	-48	-62	-64	-40	-29	-19	-23	-36	A
	B	-1	+3	+10	+12	+8	+10	+14	+14	+8	+10	+10	+7	+10	+8	+12	+16	+13	+7	+6	+10	+10	+5	+3	+2	+1	-11	B
51	A	-6	-10	-20	-42	-39	-58	(-72)	(-59)	-68	-77	-60	-39	-49	-60	-55	-59	-78	-66	-50	-65	-65	-38	-26	-22	-27	-36	A
	B	+3	+7	+10	+14	+14	+15	+20	+23	+19	+14	+15	+11	+11	+12	+22	+27	+24	+20	+17	+17	+18	+17	+14	+10	+8	-2	B
52	A	-10	-16	-24	-44	-42	-63	-78	-64	-74	-87	-68	-37	-48	-61	-55	-62	-84	-70	-52	-67	-66	-40	-29	-32	-32	-38	A
	B	+14	+18	+23	+24	+26	+28	+30	+28	+25	+18	+18	+22	+22	+22	+28	+28	+24	+26	+25	+22	+21	+21	+16	+11	+8	0	B
53	A	-16	-18	-26	-54	-51	-64	-77	-61	-74	-94	-76	-43	-52	-64	-58	-62	-85	(-74)	(-50)	-62	-63	-43	-36	-30	+37	-40	A
	B	-1	+7	+12	+8	+9	+14	+10	+3	-2	-6	-2	+8	+8	-4	-6	-8	-11	-7	+2	-4	-7	-7	-10	-12	+15	-24	B
54	A	-18	-22	-28	-56	-50	-61	-80	-62	-73	-94	-77	-46	-52	-65	-60	-61	-82	(-73)	(-52)	-66	-66	-42	-33	-28	-33	-35	A
	B	-40	-34	-36	-38	-35	-37	-40	-42	-44	-45	-34	-30	-36	-45	-46	-44	-44	-42	-36	-42	-41	-41	-42	-46	-51	-60	B
55	A	-12	-21	-26	-44	-39	-64	-84	-64	-70	-86	-69	-42	-54	-64	-57	-59	-81	-74	-56	-66	-64	-39	-27	-22	-27	-31	A
	B	-32	-31	-32	-32	-34	-36	-36	-34	-35	-42	-35	-31	-30	-32	-30	-28	-27	-27	-27	-24	-23	-28	-34	-40	-46	-54	B
56																												56

The above corrections are those to be applied to the reduced distances from the centre. The x -co-ordinate (R.A.—the A. system, lines 1 to 27) increases with increasing réseau numbers, and the y -co-ordinate (dec.—the B. system, lines 30 to 56) decreases with increasing réseau numbers.

+ corresponds to increasing R.A. and to increasing N. declination.

TABLE OF CORRECTIONS.

RÉSEAU GAUTIER No. 27.

Unit ·0001 mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
30	A	-24	-14	-11	-10	-9	-6	-10	-16	-13	-10	-8	0	0	0	0	+5	+11	+14	+17	+18	+8	+4	+6	-4	-7	+1	A	30	
	B	+10	+11	+12	+15	+14	+10	+8	+12	+14	+14	+15	+18	+21	+18	+17	+16	+16	+13	+10	+11	+11	+9	+11	+12	+8	+7	B	31	
31	A	-22	-12	-8	-8	-7	-6	-10	-14	-11	-9	-5	0	0	-1	+1	+8	+12	+14	+16	+18	+9	+3	+3	-6	-8	+2	A	31	
	B	+1	0	-1	0	+2	0	0	+4	+4	+4	+6	+7	+8	+7	+8	+9	+9	+6	+2	+4	+7	+5	+4	+4	+2	0	B	32	
32	A	-25	-15	-11	-13	-14	-11	-14	-17	-15	-14	-11	-6	-6	-7	-4	+5	+11	+13	+14	+14	+6	0	0	-10	-12	-2	A	32	
	B	-4	-2	-4	-4	-3	-5	-3	-1	0	0	+1	+3	+4	+5	+8	+7	+7	+5	+3	+5	+6	+5	+3	+2	+1	0	B	33	
33	A	-24	-12	-13	-16	-15	-11	-16	-18	-15	-16	-13	-6	-6	-7	-4	+4	+10	+12	+14	+16	+6	0	+2	-8	-11	0	A	33	
	B	-3	+2	0	0	-1	-3	-1	+2	+3	+3	+1	+5	+8	+8	+9	+8	+8	+7	+4	+6	+6	+5	+4	+3	+2	+2	B	34	
34	A	-23	-12	-12	-14	-12	-10	-17	-18	-14	-15	-12	-6	-5	-5	-2	+4	+10	+12	+13	+19	+9	0	0	-8	-8	+2	A	34	
	B	-6	-4	-6	-7	-8	-11	-9	-5	-4	-2	-4	-3	0	-1	0	0	+1	-1	-2	-1	0	-2	-4	-6	-5	-4	B	35	
35	A	-21	-11	-11	-16	-15	-12	-16	-18	-16	-16	-13	-7	-7	-7	-6	+2	+9	+11	+13	+16	+8	-1	-1	-8	-9	0	A	35	
	B	-2	+1	+1	+1	-1	-5	-4	-1	0	0	0	+1	+2	+1	+2	+2	+1	-3	-4	-4	-3	-4	-4	-6	-7	-8	B	36	
36	A	-17	-8	-8	-12	-12	-8	-12	-16	-14	-13	-10	-6	-7	-5	-4	+1	+8	+12	+14	+14	+6	0	0	-6	-8	-1	A	36	
	B	+7	+10	+11	+12	+10	+7	+8	+11	+12	+12	+12	+13	+13	+12	+14	+13	+11	+10	+8	+9	+7	+5	+4	+4	+2	+2	B	37	
37	A	-16	-8	-6	-9	-8	-5	-10	-14	-13	-13	-10	-6	-5	-1	-2	+2	+9	+12	+14	+15	+7	+2	+1	-5	-6	0	A	37	
	B	+4	+9	+8	+7	+8	+7	+8	+11	+13	+12	+11	+12	+14	+14	+14	+12	+13	+14	+14	+15	+13	+9	+6	+6	+6	+6	+8	B	38
38	A	-17	-8	-9	-9	-9	-5	-10	-16	-14	-14	-12	-7	-5	-2	-5	+2	+10	+14	+13	+13	+8	+2	0	-7	-8	0	A	38	
	B	+3	+8	+6	+5	+6	+6	+5	+9	+12	+12	+12	+14	+16	+13	+12	+12	+13	+11	+9	+10	+8	+5	+4	+4	+5	+7	B	39	
39	A	-18	-10	-10	-10	-10	-7	-10	-16	-16	-16	-11	-6	-6	-6	-7	0	+9	+13	+12	+10	+5	-1	-2	-9	-12	-4	A	39	
	B	+3	+6	+4	+4	+4	+2	+2	+8	+12	+12	+12	+14	+16	+12	+11	+12	+12	+10	+8	+8	+7	+4	+5	+4	+3	+4	B	40	
40	A	-18	-10	-8	-10	-12	-11	-13	-15	-16	-16	-11	-6	-6	-4	-5	+1	+9	+12	+12	+11	+4	-3	-3	-8	-13	-4	A	40	
	B	-3	0	-2	-1	-1	-2	-1	+4	+7	+5	+6	+11	+11	+7	+7	+8	+8	+6	+7	+9	+7	+4	+2	0	-1	0	B	41	
41	A	-15	-6	-7	-8	-5	-6	-8	-9	-10	-11	-4	-1	-4	0	+1	+5	+13	+14	+14	+14	+6	-3	-5	-8	-9	-1	A	41	
	B	-7	-3	-6	-6	-4	-5	-4	-1	+1	0	+2	+7	+8	+6	+4	+4	+2	0	+2	+2	+1	0	-3	-6	-6	-6	B	42	
42	A	-12	-3	-8	-10	-4	-2	-6	-8	-8	-8	0	+2	-3	+3	+4	+6	+12	+13	+14	+14	+5	-3	-6	-9	-8	0	A	42	
	B	-3	-2	-5	-4	-2	-1	0	+3	+5	+6	+6	+8	+11	+11	+12	+12	+10	+8	+6	+4	+5	+4	+2	+2	0	+1	B	43	
43	A	-12	-6	-10	-12	-10	-9	-12	-12	-10	-12	-5	-1	-3	+4	+4	+4	+10	+11	+12	+12	+4	-3	-4	-9	-10	-4	A	43	
	B	-2	-2	-6	-4	-1	0	+2	+6	+8	+9	+9	+11	+14	+12	+14	+16	+15	+11	+8	+7	+6	+4	+1	+1	0	+3	B	44	
44	A	-11	-6	-9	-7	-8	-9	-9	-10	-9	-10	-4	0	0	+8	+7	+5	+10	+12	+11	+10	+2	-4	-4	-10	-13	-5	A	44	
	B	0	+2	-4	-6	-3	-2	+3	+7	+7	+8	+7	+9	+12	+12	+12	+13	+12	+9	+7	+8	+8	+4	+2	+1	-1	+3	B	45	
45	A	-10	-5	-7	-5	-5	-5	-6	-9	-10	-10	-5	0	+1	+8	+8	+4	+9	+12	+10	+8	-2	-8	-8	-14	-15	-4	A	45	
	B	-8	-4	-9	-12	-9	-10	-5	0	-1	+1	0	0	+3	+4	+5	+6	+6	+4	+4	+6	+5	+2	+2	+3	0	+2	B	46	
46	A	-10	-6	-7	-6	-4	+2	0	-10	-12	-12	-4	+1	+2	+10	+8	+4	+10	+12	+13	+8	-1	-6	-10	-13	-14	-4	A	46	
	B	-13	-13	-17	-18	-17	-18	-13	-8	-7	-4	-6	-8	-5	-4	-4	-2	0	-2	-2	0	-2	-3	-5	-6	-7	-6	B	47	
47	A	-13	-9	-11	-11	-8	+1	-1	-11	-14	-13	-5	-2	-2	+9	+6	+2	+8	+8	+10	+10	+2	-4	-9	-13	-13	-5	A	47	
	B	-11	-12	-16	-17	-17	-16	-12	-7	-6	-8	-9	-7	-5	-7	-7	-4	-3	-5	-4	-3	-6	-7	-8	-12	-13	-12	B	48	
48	A	-16	-9	-10	-13	-10	-6	-8	-12	-14	-13	-6	-3	-2	+6	+2	+1	+9	+8	+9	+12	+4	-5	-10	-14	-13	-6	A	48	
	B	-12	-10	-14	-15	-14	-18	-17	-10	-8	-13	-12	-8	-8	-10	-9	-8	-8	-10	-10	-9	-12	-13	-13	-15	-15	-15	B	49	
49	A	-16	-8	-7	-10	-9	-6	-6	-10	-13	-12	-6	-2	0	+9	+6	+6	+13	+12	+11	+13	+5	-4	-6	-11	-13	-6	A	49	
	B	-10	-11	-14	-14	-12	-16	-17	-12	-7	-8	-9	-7	-7	-8	-6	-6	-8	-10	-11	-8	-9	-12	-13	-13	-12	-14	B	50	
50	A	-15	-10	-7	-7	-6	-5	-6	-10	-14	-13	-6	-1	+2	+10	+7	+7	+14	+12	+10	+12	+4	-3	-2	-8	-11	-3	A	50	
	B	-6	-7	-12	-11	-8	-10	-10	-6	-2	0	-1	0	+1	0	+2	+2	+2	0	-1	0	+1	-1	-2	-2	-1	-4	B	51	
51	A	-14	-8	-5	-6	-4	-2	-7	-11	-12	-9	-5	-2	0	+6	+2	+6	+16	+13	+12	+14	+5	-1	-2	-6	-8	0	A	51	
	B	-6	-6	-10	-11	-10	-10	-8	-6	-4	-2	0	+3	+3	+2	+5	+6	+6	+3	0	+2	+2	+1	-1	0	+2	+1	B	52	
52	A	-14	-6	-4	-7	-4	-1	-7	-11	-10	-9	-6	-2	-3	+1	0	+6	+16	+15	+14	+12	+5	-1	-3	-7	-9	-1	A	52	
	B	-6	-5	-9	-11	-10	-10	-8	-4	-2	0	+2	+4	+6	+4	+6	+8	+8	+5	+2	+4	+5	+2	+1	+3	+2	+2	B	53	
53	A	-13	-4	-2	-4	0	+1	-7	-9	-6	-6	-4	0	-2	+1	+2	+6	+14	+15	+12	+11	+4	-2	-2	-6	-5	+3	A	53	
	B	-5	-2	-6	-6	-5	-6	-5	0	+3	+4	+4	+6	+8	+5	+6	+8	+9	+8	+8	+9	+9	+7	+4	+5	+5	+6	B	54	
54	A	-10	-4	0	-1	+2	+4	-6	-8	-5	-4	-2	+1	-1	+2	+3	+6	+14	+14	+11	+12	+6	-1	0	-4	-4	+4	A	54	
	B	-3	0	0	0	-2	-4	-2	+2	+4	+4	+5	+8	+8	+7	+8	+8	+8	+6	+9	+11	+10	+8	+4	+3	+4	+7	B	55	
55	A	-4	0	+3	+1	+3	+5	-3	-5	-2	-2	0	+3	0	+2	0	+4	+16	+16	+14	+14	+8	+1	0	-2	-5	+3	A	55	
	B	-2	-4	2	-2	-7	-7	-5	-4	-2	-1	-2	+2	+6	+4	+6	+8	+7	+4	+5	+5	+5	+5	+4	+2	+1	+4	B	56	

The above corrections are those to be applied to the reduced distances from the centre. The x -co-ordinate (R.A.—the A system, lines 1 to 27) increases with increasing réseau numbers, and the y -co-ordinate (dec.—the B system, lines 30 to 56) decreases with increasing réseau numbers.

+ corresponds to increasing R.A. and to increasing N. declination.

TABLE OF CORRECTIONS.

RÉSEAU GAUTIER No. 23.

Unit 0.001 mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
30	A	-29	-18	-17	-17	-13	-7	-10	-15	-16	-11	-3	-2	-6	-2	0	+2	+6	+2	0	+2	-3	-3	+5	+6	+3	+10	A	30
31	B	+14	+18	+17	+14	+16	+22	+22	+19	+18	+16	+14	+14	+14	+17	+20	+21	+23	+22	+20	+18	+16	+16	+13	+11	+11	+12	B	31
32	A	-26	-16	-13	-13	-10	-5	-9	-14	-12	-6	+1	+1	-3	0	+2	+7	+11	+6	+2	+3	0	-1	+4	+6	+5	+11	A	32
33	B	+3	+4	0	-2	+2	+6	+5	+2	0	+1	0	-1	-1	+4	+8	+9	+11	+10	+4	+2	+3	+3	+2	+2	+2	+2	B	33
34	A	-26	-15	-12	-12	-11	-5	-9	-13	-11	-6	0	+1	-4	-1	0	+6	+10	+4	+2	+3	0	-1	+4	+5	+4	+12	A	34
35	B	+4	+5	+4	+3	+1	+2	+4	+4	+2	+2	+1	+1	+2	+5	+8	+9	+9	+7	+4	+3	+4	+2	-1	0	-1	-2	B	35
36	A	-24	-13	-11	-12	-9	-4	-9	-14	-13	-10	-2	-2	-6	0	+1	+4	+6	+1	+1	+4	+2	0	+4	+6	+5	+12	A	36
37	B	+8	+10	+9	+6	+4	+6	+10	+8	+8	+8	+5	+6	+6	+7	+11	+12	+11	+8	+7	+9	+10	+6	+1	-1	0	+1	B	37
38	A	-26	-14	-12	-13	-9	-5	-10	-14	-15	-11	-2	-4	-8	+2	+3	+5	+6	0	+1	+4	0	0	+4	+5	+6	+12	A	38
39	B	0	0	-2	-5	-4	0	+2	0	+1	+2	-2	-2	-4	-4	+2	+6	+7	+4	+2	+2	+2	0	-4	-6	-6	-3	B	39
40	A	-27	-15	-12	-13	-9	-3	-7	-12	-14	-10	0	-3	-8	0	+2	+4	+6	+2	+2	+5	+2	+1	+5	+5	+5	+12	A	40
41	B	-8	-9	-12	-14	-14	-9	-6	-5	-4	-6	-7	-7	-9	-8	-4	+1	+3	+1	-1	-2	-4	-4	-7	-9	-9	-5	B	41
42	A	-25	-12	-8	-8	-5	0	-5	-10	-12	-7	+1	0	-4	0	(+2)	(+4)	+8	+6	+4	+7	+7	+7	+10	+10	+10	+16	A	42
43	B	-3	-2	-3	-5	-6	-2	+2	+2	+1	-1	-1	-1	-1	+2	(+6)	(+8)	+9	+5	+6	+6	+4	+4	0	-2	-1	+4	B	43
44	A	-24	-8	-4	-8	-5	0	-6	-10	-9	-5	+2	(+2)	(-2)	+1	(+3)	(+5)	+9	+8	+5	+6	+7	+8	+11	+11	+11	+17	A	44
45	B	+4	+2	+1	+2	+1	+4	+6	+5	+4	+3	+2	(+3)	(+4)	+6	(+9)	(+13)	+13	+9	+8	+10	+9	+6	+2	0	+2	+4	B	45
46	A	-24	-10	-7	-10	-6	-1	-6	-10	-10	-6	+2	(+2)	(-3)	0	+3	+4	+6	+6	+4	+4	+4	+4	+9	+8	+7	+13	A	46
47	B	+4	0	-1	0	+2	+4	+5	+6	+5	+4	+4	(+7)	(+7)	+6	+9	+14	+14	+12	+12	+12	+11	+8	+5	+3	+2	+4	B	47
48	A	-24	-10	-9	-11	-4	0	-6	-10	-11	-7	+1	0	-4	0	+2	+2	+2	+4	+4	+3	+4	+3	+7	+5	+4	+11	A	48
49	B	+1	+1	-1	-1	-1	0	+2	+3	+2	0	0	+4	+5	+6	+9	+12	+13	+12	+10	+11	+9	+6	+2	+1	0	+2	B	49
50	A	-23	-10	-11	-13	-5	0	-6	-8	-9	-6	+1	(-2)	(-6)	-1	+2	0	0	+2	+2	+2	+2	+3	+6	+2	+1	+8	A	50
51	B	-2	0	-1	-1	-3	-2	0	-1	-1	-2	-2	0	+3	+6	+10	+11	+12	+10	+10	+10	+8	+5	+2	0	-2	-1	B	51
52	A	-22	-10	-9	-11	-5	+2	-1	-4	-6	-4	+3	(-1)	(-6)	0	+3	+1	+2	+2	+2	+4	+3	+3	+8	+5	0	+6	A	52
53	B	-5	-2	-3	-4	-4	-4	-2	-2	-1	-2	-3	-2	-1	+4	+8	+10	+11	+7	+7	+9	+7	+5	+2	0	-1	-1	B	53
54	A	-20	-8	-4	-6	-2	+6	+1	-4	-4	-1	+5	+1	-4	+3	+6	+4	+5	+4	+3	+6	+5	+2	+8	+8	+2	+9	A	54
55	B	0	+3	+1	-2	-1	+2	+3	+4	+4	+1	-2	-2	-1	+2	+7	+9	+10	+6	+5	+8	+7	+6	+1	0	+1	+2	B	55
56	A	-20	-8	-3	-2	+2	+5	0	-4	-3	0	+3	0	-3	+4	+8	+5	+4	+4	+2	+4	+4	0	+4	+6	+4	+12	A	56
57	B	-3	-1	-2	-2	-2	+1	+2	+2	+2	+2	+1	+2	+2	+4	+7	+8	+9	+6	+4	+9	+9	+6	+4	0	0	+2	B	57
58	A	-21	-8	-2	0	+4	+6	+1	-3	-4	-1	+3	-1	-2	+6	+8	+5	+3	+4	+2	+2	+2	0	+4	+5	+4	+10	A	58
59	B	-6	-6	-6	-6	-6	-2	0	-2	-2	0	+1	+2	+2	+4	+7	+8	+10	+5	+4	+10	+10	+7	+5	+3	+2	+3	B	59
60	A	-22	-7	0	+1	-1	+2	+2	-4	-4	0	+5	+1	-4	+4	+6	+4	+4	+4	+4	+3	+1	0	+4	+5	+4	+9	A	60
61	B	-4	-4	-5	-5	-6	-1	+1	0	0	0	-3	0	+2	+4	+7	+10	+10	+6	+6	+9	+8	+6	+3	0	0	0	B	61
62	A	-20	-6	0	+1	0	+5	+4	-3	-4	-1	+6	+3	-4	+4	+6	+5	+5	+5	+3	+3	+3	+2	+5	+6	+4	+10	A	62
63	B	-9	-10	-10	-8	-8	-6	-4	-2	-4	-6	-9	-6	-3	-4	(-2)	(-1)	0	-2	-1	+1	-2	-4	-8	-10	-8	-6	B	63
64	A	-20	-5	0	0	+5	+10	+4	-3	-4	-1	+7	+3	-1	+6	+5	+3	+4	+4	+1	+1	+2	+3	+5	+4	+2	+10	A	64
65	B	-8	-8	-8	-8	-8	-8	-4	-2	-3	-3	-4	-3	-2	-2	(-2)	(-2)	0	-1	-2	0	-2	-3	-6	-6	-5	-3	B	65
66	A	-20	-3	+2	-2	+2	+6	+1	-4	-4	-1	+6	+2	-1	+4	+2	-1	0	+2	+1	0	0	+2	+3	+2	0	+8	A	66
67	B	-7	-6	-5	-4	-5	-4	-2	-1	-1	0	-1	0	+2	+4	+5	+5	+8	+5	+3	+6	+3	+2	0	+1	0	+1	B	67
68	A	-21	-2	+4	-2	+2	+8	+2	-3	-2	-2	+4	+2	-3	+2	+3	0	0	+3	+2	0	-2	0	+4	+2	0	+9	A	68
69	B	-12	-11	-11	-10	-8	-6	-6	-7	-8	-8	-10	-7	-3	-3	+1	+1	+1	-1	-1	+4	+2	-2	-4	-2	-1	-3	B	69
70	A	-20	0	+5	0	+6	+11	+4	-4	-2	0	+5	+3	-2	+2	+3	0	+2	+5	+2	0	-1	-1	+4	+2	0	+10	A	70
71	B	-6	-3	-3	-3	-3	-1	-2	-2	-1	-2	-4	-1	+2	+2	+8	+8	+7	+7	+8	+12	+10	+5	+3	+6	+7	+5	B	71
72	A	-20	0	+3	0	+4	+9	+1	-7	-6	-2	+4	0	-2	0	0	-2	0	+4	+2	0	-2	-2	+2	0	-2	+4	A	72
73	B	-1	+3	+4	+2	+2	+3	+3	+5	+7	+6	+4	+6	+6	+9	+13	+14	+16	+14	+12	+16	+15	+12	+10	+9	+9	+8	B	73
74	A	-20	0	+3	0	+4	+8	0	-7	-6	-4	+2	-1	-4	0	0	-1	0	+4	+4	-1	-6	-3	+2	0	-4	+2	A	74
75	B	-2	-2	-2	-3	-3	-1	0	+2	+2	+2	+1	+1	0	+5	+9	+10	+13	+10	+9	+12	+14	+14	+9	+7	+9	+8	B	75
76	A	-17	+2	+7	+1	+8	+13	+2	-4	-4	-2	+6	+2	-2	+6	+6	+2	+4	+6	+6	+3	-4	-3	+3	+1	-1	+6	A	76
77	B	-5	-8	-8	-10	-10	-7	-5	-6	-7	-6	-5	-6	-7	-4	0	+2	+5	+4	+2	+4	+3	+3	+1	+1	+4	+3	B	77
78	A	-15	+2	+6	0	+6	+14	+4	-2	-1	+1	+8	+3	-2	+8	+9	+4	+6	+9	+8	+3	-4	-3	+4	+2	-1	+8	A	78
79	B	-4	-6	-9	-12	-12	-8	-6	-6	-5	-5	-5	-5	-6	-3	0	+3	+6	+5	+4	+6	+6	+5	0	+1	+6	+6	B	79
80	A	-11	+4	+3	-2	+7	+17	+9	+3	+5	+6	+10	+6	+1	+9	+12	+4	+5	+12	+10	+4	-1	+2	+8	+5	+2	+12	A	80
81	B	-6	-7	-7	-11	-12	-9	-8	-6	-4	-4	-5	-3	-2	0	+3	+6	+8	+9	+11	+11	+13	+11	+5	+7	+10	+10	B	81

The above corrections are those to be applied to the reduced distances from the centre. The x -co-ordinate (R.A.—the A. system, lines 1 to 27) increases with increasing réseau numbers, and the y -co-ordinate (dec.—the B. system, lines 30 to 56) decreases with increasing réseau numbers.

+ corresponds to increasing R.A. and to increasing N. declination.

STANDARD CO-ORDINATES OF REFERENCE STARS.

For a star whose position is α, δ the standard co-ordinates ξ, η on a plate with centre at A, D will be given by—

$$\begin{aligned}\xi &= \sin(\alpha - A) \cos \delta + \frac{1}{2} \xi (\xi^2 + \eta^2) + \dots \\ \eta &= \tan(\delta - D) + \frac{1}{2} \xi^2 \tan \delta \\ &\quad - \frac{1}{8} \xi^4 \tan \delta \cdot \frac{\cos(\delta - D) \cos(\delta + D)}{\cos^2 \delta} \\ &\quad + \frac{1}{16} \xi^6 \tan \delta \frac{\cos^2(\delta - D) \cos^2(\delta + D)}{\cos^4 \delta} - \dots\end{aligned}$$

where ξ increases with R.A. and η increases to the north (Dyson M.N. 64, 647, 1904).

These expressions were used as a starting point in the computations of the standard co-ordinates for plates with centres from -65° to -84° . As it is desired to keep the final result correct to $\cdot'001$, each term has been taken to $\cdot'0001$ and the corrections arranged so that they will be correct to $\cdot'0001$ or $\cdot'0002$.

Using k to denote the minutes of arc in the radian, and expressing all quantities in minutes of arc, the first term in ξ is written $k \sin(\alpha - A) \cos \delta = \frac{k \sin(\alpha - A)}{\alpha - A} (\alpha - A) \cos \delta$

The maximum value of $(\alpha - A)$ that occurs is $720'$. Log $\frac{k \sin(\alpha - A)}{\alpha - A}$ has been tabulated for each minute of arc, and interpolation is easy. The logarithms of the other quantities are taken from the usual tables.

The value of $\frac{1}{2} \xi (\xi^2 + \eta^2)/k^2$ when $\xi = 65', \eta = 65'$ is $\cdot'0232$, and decreases rapidly as the centre of the plate is approached. It can be represented by curves (Hinks, Mem. R.A.S. Vol. 57, 1908) from which the correction can be read off to within $\cdot'0002$ with ease. Approximate values of ξ and η (correct to $\cdot'1$) are sufficient for obtaining the correction. An alignment chart may be readily constructed for the value of this term. The scale for η is laid off along BA , the length BG being made equal to $m_1 \eta^2$, that for $Q \equiv \frac{1}{2} \xi (\xi^2 + \eta^2)/k^2$ along CD , which is parallel to AB , the length CH being made equal to $m_2 \cdot 2 Q \cdot k^2$. The length BC being l , the position of the point F defining the ξ scale will be given by—

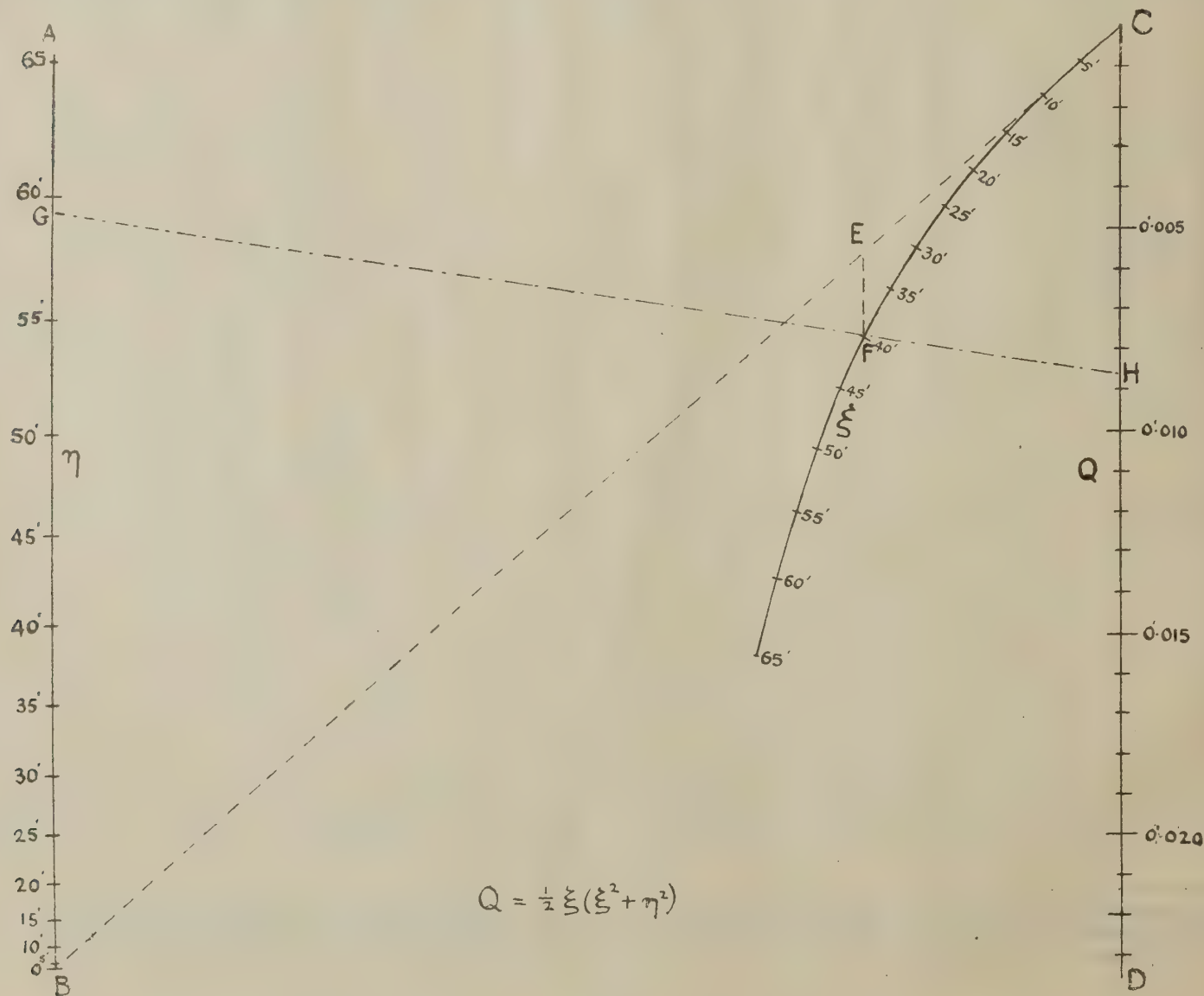
$$BE = \frac{l}{1 + \frac{m_2}{m_1} \xi}, \quad EF = \frac{m_2}{1 + \frac{m_2}{m_1} \xi} \xi^3$$

Convenient values are $m_1 = 1.8 \times 10^{-3}$, $m_2 = 1.44 \times 10^{-5}$, $l = 12$, which give—

$$\begin{aligned}BG &= 1.8 \times 10^{-3} \eta^2 & CH &= 340.4 Q \\ BE &= \frac{12}{1 + .008 \xi} & EF &= 1.2 \times 10^{-6} \xi^3 BE\end{aligned}$$

The term $k \tan(\delta - D)$ is written in the form $\delta - D + [k(\tan(\delta - D) - (\delta - D))]$

The value of $k \tan(\delta - D) - (\delta - D)$ is most conveniently tabulated in two columns, which give the limits of $(\delta - D)$ between which the correction has a certain value. It has been tabulated for each $\cdot'0001$.



For $\frac{1}{2} \xi^2 \tan \delta/k$, the approximate value of ξ , namely—

$$\xi_1 = k \sin (\alpha - A) \cos \delta,$$

is used and later a correction is applied—

$$\frac{1}{2} \xi^2 \tan \delta/k = \frac{1}{2} \xi_1^2 \tan \delta/k + \xi \tan \delta (\xi - \xi_1)/k$$

where $\xi - \xi_1$ is the correction Q.

The value of $\log \xi_1$ already appears, so the main term is best computed by logarithms.

The expression $\xi \tan \delta/k$ has a maximum value $\cdot 22$ at 85° and can be taken from curves (ordinates ξ, δ) or an alignment chart. The maximum value of $\xi - \xi_1$ is $\cdot 023$, so that the product may reach $\cdot 0051$. Neglecting the third significant figure in the factors gives a maximum error of $\cdot 0003$, but this error is quite exceptional. The neglect of this term leads to no appreciable error in $\frac{1}{2} \xi (\xi^2 + \eta^2)/k^2$.

The remaining terms in η , expanded in powers of $(\delta - D)$, give—

$$-\frac{1}{8} \frac{\xi^4}{k^3} \tan \delta \frac{\cos 2 \delta}{\cos^2 \delta} + \frac{1}{16} \frac{\xi^6}{k^5} \tan \delta \frac{\cos^2 2 \delta}{\cos^4 \delta} - \frac{1}{8} \frac{\xi^4}{k^4} 2 \tan^2 \delta (\delta - D) + \dots$$

further terms being negligible.

The last term may in very extreme cases have a value $\cdot 0002$, but this is quite exceptional. It has therefore been omitted, and the other two terms have been combined (the second one is generally negligible) and curves drawn (co-ordinates ξ, δ) from which the correction can be read off correct to $\cdot 0002$. The complete form used for the computation is shown.

STANDARD CO-ORDINATES OF STANDARD STARS.

Plate Centre A 2^h 30^m. D = 67° . Plate 826.

Order of Operations 2-6, 11, 7, 8, 12, 13, 15-20, 9, 10, 21, 22.

c = 6.16270.

	STAR.	
1	α	^h 2 21 ^m 52 ^s 32
2	$\alpha - A$ m s	— 8 7 68
3	$\alpha - A'$	— 121 9200
4	$\log (\alpha - A)$	2 0860750
5	S	9 9999089
6	$\log \cos \delta$	9 5821496
7	(4) + (5) + (6)	1 6681335
8	antilog (7) = ξ_1	— 46 5729
9	Q	— 65
10	(8) + (9) = ξ	— 46 5794
11	$\log \tan \delta$	10 38359
12	(7) \times 2	3 33627
13	(11) + (12) + c	— 1 88256
14	δ	— $67^\circ 32' 15'' 62$
15	$\delta - D'$ "	— 32 15 62
16	$\delta - D'$	— 32 2603
17	T	— 9
18	antilog (13)	— 7631
19	P	— 2
20	(16) \cdot (19) = η_1	— 33 0245
21	$\xi \tan \delta (\xi - \xi_1)$	— 2
22	(20) + (21) = η	— 33 0247

In the most unfavourable case the error of ξ may amount to $\cdot 0002$ and in η to $\cdot 0008$. This includes errors of $\cdot 0002$ in reading off the values of the corrections from curves and also the errors arising from the neglected terms.

In obtaining the final plate constants, proper motion to the epoch of the plate will be applied where known. In such cases, differential corrections are applied to the standard co-ordinates. The only terms that need be considered here are—

$$\xi = \sin (\alpha - A) \cdot \cos \delta$$

$$\eta = \tan (\delta - D) + \frac{1}{2} \xi^2 \tan \delta. \text{ (circular measure).}$$

Differentiating and expressing all quantities in minutes of arc as before—

$$d\xi = \cos (\alpha - A) \cdot \cos \delta \cdot d\alpha - \sin (\alpha - A) \cdot \sin \delta \cdot d\delta$$

$$d\eta = \sec^2 (\delta - D) \cdot d\delta + \frac{\xi \tan \delta}{k} \cdot d\xi + \frac{\xi^2 \sec^2 \delta}{2k^2} \cdot d\delta,$$

and these may be used in the form—

$$d\xi = \cos \delta \cdot d\alpha - (1 - \cos \alpha - A) \cos \delta \cdot d\alpha - \frac{\xi \tan \delta}{k} \cdot d\delta$$

$$d\eta = d\delta + \frac{1}{2} \cdot \frac{\xi^2 \sec^2 \delta}{k^2} \cdot d\delta + \frac{\xi \tan \delta}{k} \cdot d\xi.$$

An alignment chart is used for the term $\cos \delta d\alpha$, a small diagram or a table for $1 - \cos (\alpha - A)$, and the value of $\xi \tan \delta/k$ found as before. Curves (co-ordinates ξ, δ) have been drawn for $\frac{1}{2} \xi^2 \sec^2 \delta/k^2$. The corrections $d\xi, d\eta$ can thus be rapidly found.

The above formulae have been used for the zones -65° to -84° . South of this, the corrections become too large to apply conveniently, and the expressions given by Rambaut (M.N. 70, 655, 1910) were used. These are—

$$\xi = X + \frac{1}{2k^2} \cdot X (X^2 + Y^2) + \dots$$

$$\eta = Y + \frac{1}{2k^2} \cdot Y (X^2 + Y^2) + \dots$$

where $X = k \cos \delta \cdot \sin (\alpha - A)$

$$Y = k \sin (\delta - D) + X \cdot \tan \frac{1}{2} (\alpha - A) \sin D$$

the terms of higher order in ξ and η being always negligible.

If $\alpha - A$ is small, then use is made of the identities—

$$\log k \sin (\alpha - A) = \log (\alpha - A) + \log \frac{k \sin (\alpha - A)}{\alpha - A}$$

$$\text{and } \log \tan \frac{1}{2} (\alpha - A) = \log (\alpha - A) + \frac{\log k \tan \frac{1}{2} (\alpha - A)}{\frac{1}{2} (\alpha - A)} + \log \frac{1}{2k}$$

and, if δ is nearly $\pm 90^\circ$, of

$$\log \cos \delta = \log \sin (90^\circ \mp \delta)$$

$$= \log \frac{90^\circ \mp \delta}{k} + \log \frac{k \sin (90^\circ \mp \delta)}{90^\circ \mp \delta}$$

$$k \sin (\delta - D) = \delta - D + [k \sin (\delta - D) - (\delta - D)]$$

The only new tables required are $(\delta - D) - k \sin (\delta - D)$, and $\log \frac{k \tan \alpha}{\alpha}$. The first is arranged in two columns, giving the limiting values of $(\delta - D)$ for each $\cdot 0001$ of the expression, and the second giving the value for each minute of α .

The form of computation adopted is shown, the left hand form being used where $\alpha - A$ is less than 5° , the right hand where α is greater. The constants c, c_2 printed at the top are $\log \frac{1}{2k}$ and

$\log \frac{1}{k}$ respectively, and the references S, E, F, Q are to the tables for $\log \frac{k \sin \alpha}{\alpha}$, $\log \frac{k \tan \alpha}{\alpha}$, $(k \sin \alpha - \alpha)$ and the curves for

$\frac{1}{2k} \xi (\xi^2 + \eta^2)$ respectively. Q for $\eta_1 \xi_1$ means that η_1 is to be used as abscissa, ξ_1 as ordinate.

STANDARD CO-ORDINATES OF STANDARD STARS.

log sin D 9.9994044
 c 6.1626961
 c + log sin D = c₁ 6.1621005
 c₂ 6.4637261

Plate Centre A 3h 45m. D = 87°. Plate
 Order of Operations 1-15, 18-21, 16, 22, 17, 23.

STAR.			STAR.		
		^h ^m ^s			^h ^m ^s
1	α	3 26 55.30	1	α	2 58 54.51
2	α - A m s	- 18 4.70	2	α - A m s	- 46 5.49
3	α - A'	-271.175	3	α - A °'	-11° 31.372
4	$\frac{1}{2}(\alpha - A)'$	-135.588	4	$\frac{1}{2}(\alpha - A)''$	- 5 45.686
5	δ	-86° 10' 55.48	5	δ	-86° 16' 7.29
6	90° + δ	+ 3 49 4.52	6	90° + δ	+ 3 43 52.71
7	(90° + δ)'	+229.0753	7	(90° + δ)'	+223.8785
8	log (90° + δ)'	2.3599783	8	log (90° + δ)'	2.3500124
9	S for (7)	9.9996786	9	S for (7)	9.9996929
10	S for (3)	9.9995495	11	log sin (α - A)	9.3005063
11	log (α - A)'	2.4332497	12	(8) + (9) + (11)	1.6502116
12	(8) + (11) + c ₂	1.2561822	13	log tan $\frac{1}{2}(\alpha - A)$	9.0038747
13	E for (4)	2252	14	(12) + (13) + log sin D	0.6534907
14	(11) + (13) + c ₁	1.8517576			
15	antilog (12) = ξ ₁	-18.0377	15	antilog (12) = ξ ₁	-44.6901
16	Q for ξ ₁ , η ₁	21	16	Q for ξ ₁ , η ₁	67
17	(15) + (16) = ξ	-18.0398	17	(15) + (16) = ξ	-44.6968
18	δ - D'	+49.0753	18	δ - D'	+43.8785
19	F for (18)	17	19	F for (18)	12
20	antilog (14)	7108	20	antilog (14)	4.5029
21	(18) + (20) = η ₁	+48.3628	21	(18) + (20) = η ₁	+39.3744
22	Q for η ₁ , ξ ₁	55	22	Q for η ₁ , ξ ₁	59
23	(21) + (22) = η	+48.3683	23	(21) + (22) = η	+39.3803

If the pole is included in the plate, the value of α - A for a portion of the plate will be greater than 90°. It will be convenient for this portion of the plate to take the declination of the plate centre as measured through the pole, the R.A. being increased by 12h. This will alter the sign of Y.

R.A. AND DEC. FROM STANDARD CO-ORDINATES.

For the converse problem of determining the R.A. and Dec. when the standard co-ordinates are known, using the same notation as before, let *d* be the declination of the point with standard co-ordinates (*o*, *η*). Then—

$$\begin{aligned}\tan (d - D) &= \eta, \\ \tan (\alpha - A) &= \xi \cos (d - D) \sec d = a \text{ (say),} \\ \sin (d - \delta) &= \frac{1}{2} \sin 2d \cos v [\sec (\alpha - A) - 1]\end{aligned}$$

where $\tan v = \xi \cos (d - D)$ and the radian is used as unit.

(See Hamburg-Bergedorf Mitteilungen Band S. No. 19 or in a slightly different form Greenwich Astrographic Catalogue, Vol. I. Introd. p. lvii).

From these equations it follows—

$$\begin{aligned}d - D &= \tan^{-1} \eta \\ &= \eta - \frac{1}{3} \eta^3 + \frac{1}{5} \eta^5 - \dots\end{aligned}$$

$$\begin{aligned}\log_e \cos (d - D) &= \log_e \frac{1}{\sqrt{1 + \eta^2}} \\ &= -\frac{1}{2} \eta^2 + \frac{1}{4} \eta^4 - \dots\end{aligned}$$

$$\begin{aligned}\alpha - A &= \tan^{-1} a \\ &= a - \frac{1}{3} a^3 + \frac{1}{5} a^5 - \frac{1}{7} a^7 + \dots\end{aligned}$$

$$\begin{aligned}\log_e [\sec (\alpha - A) - 1] &= \log_e [\sqrt{1 + a^2} - 1] \\ &= \log_e \frac{1}{2} a^2 - \frac{1}{4} a^2 + \frac{3}{8} a^4 - \frac{5}{16} a^6 + \frac{35}{1024} a^8 + \dots\end{aligned}$$

$$\begin{aligned}\log_e \cos v &= -\log_e \sqrt{1 + \tan^2 v} \\ &= -\frac{1}{2} \tan^2 v + \frac{1}{2.2} \tan^4 v - \dots \\ &= -\frac{1}{2} \xi^2 \dots\end{aligned}$$

Substitute these values in the original equations, convert from natural logarithms to ordinary logarithms, and express the angles α - A and *a* in seconds of time, the remaining angles in minutes of arc. Then—

$$(d - D)' = \eta' + \text{I.}$$

$$\log a_s = \log \xi' + \log \sec d + \text{II.}$$

$$(\alpha - A)_s = a_s + \text{III.}$$

$$\log (d - \delta)' = \log \sin d + \log \cos d + 2 \log a_s + \text{IV.} + \text{V.}$$

where—

$$\text{I.} = -2.820 \times 10^{-8} \eta'^3$$

$$\text{II.} = .602060 - 1.8374 \times 10^{-8} \eta'^2$$

$$\text{III.} = -1.76283 \times 10^{-9} a_s^3 + 5.594 \times 10^{-18} a_s^5 - 2.113 \times 10^{-26} a_s^7 - \dots$$

$$\text{IV.} = 6.948576 - 1.8374 \times 10^{-8} \xi'^2$$

$$\text{V.} = .01 - 5.742 \times 10^{-10} a_s^2 + 1.139 \times 10^{-18} a_s^4 - 3.3 \times 10^{-27} a_s^6 + \dots$$

The values of these corrections are tabulated at the end of this Introduction, where an example of the use of the tables is given.

For the polar cap the formulae given by Cowell (Greenwich Astrographic Catalogue, Vol. II., Introduction, p. xviii.) have been adopted. Using ξ₀, η₀ to represent the co-ordinates with the S. pole as origin on a plate with its centre at the S. pole, the positive axis of η₀ being the projection of the hour circle through A and ξ₀ increasing with R.A. when η₀ is positive, then—

$$\xi_0 = -\cot \delta \sin (\alpha - A),$$

$$\eta_0 = -\cot \delta \cos (\alpha - A),$$

where ξ₀ and η₀ are given by the equations—

$$\xi_0 = \xi \frac{-\operatorname{cosec} D}{1 + \cot D. \eta} \quad \eta_0 = \frac{\eta - \cot D.}{1 + \cot D. \eta}$$

When ξ, η, ξ₀, η₀ are expressed in minutes of arc these become—

$$\xi_0 = -\xi \frac{\operatorname{cosec} D}{1 + \frac{\cot D}{k} \eta} \quad \eta_0 = \frac{\eta - k \cot D}{1 + \frac{\cot D}{k} \eta}$$

$$\tan (\alpha - A) = \xi_0 / \eta_0; \quad -\cot \delta = \frac{\eta_0}{k} \sec (\alpha - A).$$

The values of the terms in D are given in the following table :—

D.	Log (— cosec D) = c_1 .	— $k \cot D$ = c_2 .	Cot D/k .
—89°	•000066	+ 60'•006	— •00000508
—88°	265	+120'•049	— 1016
—87°	596	+180'•165	— 1524
—86°	1059	+240'•391	— 2034
—85°	1656	+300'•764	— 2545

To facilitate computation, the logarithm of the denominator has been formed for each minute of η for each of the above zones, and is given in Table VI. at the end of the Introduction. An example of the use of these formulæ is also given.

REFRACTION.

The effect of refraction has been shown by Turner (M.N. 57, p. 135, 1896) to be—

$$\Delta\xi = \beta_0 X - \beta_0 \xi(1 + X^2) - \beta_0 \eta XY + \beta_0 \xi^2 X(2 + X^2) + \beta_0 \xi \eta Y(1 + 2X^2) + \beta_0 \eta^2 X(1 + Y^2),$$

$$\Delta\eta = \beta_0 Y - \beta_0 \xi XY - \beta_0 \eta(1 + Y^2) + \beta_0 \xi^2 Y(1 + X^2) + \beta_0 \xi \eta X(1 + 2Y^2) + \beta_0 \eta^2 Y(2 + Y^2),$$

where ξ, η are the co-ordinates of the star on the plate, X, Y are the co-ordinates of the zenith on the plate, and β_0 is the co-efficient of refraction.

The first term in each expression is constant for the plate, and the second and third terms will be included in the plate constants. In the case of the Melbourne plates, where zenith distances as great as 52° occur, it is necessary to examine the effect of the second order terms, and where necessary correct the computed standard co-ordinates. The Melbourne plates were all taken near the meridian, in most cases within a few minutes of it. In consequence, if the second order terms are computed on the assumption that the hour angle of the plate centre is zero, the error introduced will be negligible, amounting to '•0003 in the extreme corners of one plate only. The effects of the second order terms for hour angle X are given in Table VII., where ξ and η are to be expressed in minutes of arc, and the effects are given in minutes $\times 10^{-8}$.

Curves for these corrections have been plotted for each '•0001 of the correction, and can be read off very quickly. The corrections have been applied to the standard co-ordinates before the computation of the plate constants.

THE DETERMINATION OF PLATE CONSTANTS.

The positions of the stars on which the plate constants rest have all been determined with the 8-in. transit circle of this Observatory, and in the determination of the provisional plate constants the observed positions have been used. For the final plate constants, the proper motion of the stars has been found wherever possible, and this proper motion will be applied to find the star position at the epoch of the plate. The stars divide into three distinct groups—

- (1) The stars used as guide stars.
- (2) The original reference stars.
- (3) The supplementary reference stars.

The guide stars were chosen in accordance with the resolutions of the 1889 and 1891 Astrographic Conferences—

1889 (11). On prendra comme étoile-guide une belle étoile du champ dont la position soit connue à 5" près.

1891 (1). Rien n'est changé aux conditions de distance et de grandeur d'étoiles dans lesquelles ont été faites les diverses parties du Catalogue des étoiles-guides.

Toutefois, lorsqu'un astronome trouvera que l'étoile-guide qui lui est fournie par le Catalogue n'est pas d'un éclat suffisant, il aura la liberté de choisir lui-même une étoile plus brillante jusqu'à 40' du centre de la plaque.

Actually all the guide stars were observed or re-observed at Melbourne, and the positions are given in the Third Melbourne General Catalogue (Me 3).

The original reference stars were chosen on the plates themselves and were designated by the plate number and a distinguishing letter thus: 729a, 814d, and so on. Five stars were chosen on each plate, and apparently each plate was treated independently of the overlapping ones. Thus cases occur in which the same star was chosen as reference star for two plates, and others in which the guide star on one plate appears as a reference star on another. The selection of the reference stars went on concurrently with the earlier part of the observations on the meridian, and in consequence some of the stars appear with six observations instead of the usual three, and others which already appear in Me3 were re-observed. The original intention seems to have been to determine the plate constants from the positions of the five reference stars selected from that plate, but in accordance with the resolution passed by the Permanent Committee in 1896

1896 (3). . . . On adoptera, pour le calcul des constantes d'un cliché, un minimum de 10 étoiles si la chose est possible—the reference stars from overlapping plates were added, and further stars were chosen to bring up the number to the minimum. The positions of the original reference stars are given in the Fourth Melbourne General Catalogue (Me 4). In addition to the observed positions, this catalogue contains the proper motion, wherever it has been possible to determine it, and the data on which the determination of the proper motion rests.

It could not be expected, from the way in which the reference stars had been selected, that the distribution over each plate would be uniform. In 1909 the position of each reference star was plotted on squared paper, on which the boundary of each plate was shown as well. The list was examined, and all stars brighter than the sixth magnitude and all stars recorded as double were excluded. The result showed, as had been anticipated, that in some parts an unnecessarily large number of stars had been observed; in other parts large areas were without any reference stars. Hence it became apparent at once that, if reliable values of the plate constants were to be obtained, additional reference stars were required.

The supplementary reference stars were therefore selected, suitably placed stars being chosen from the C.P.D. In this way a much more uniform distribution was obtained, so that with the better distribution and more numerous stars a much stronger determination of the plate constants will be got. These supplementary reference stars have also been observed with the transit circle here, and the positions, together with proper motions and the data on which the proper motions rest, appear in the Fifth Melbourne General Catalogue Me 5, which contains 2,603 stars.

When the determination of the provisional plate constants was being carried out, the values of the proper motions were not available, and the positions which appear in Me 5 were not complete. The reference stars were therefore confined to those appearing in Me 3 and Me 4, only such stars from Me 5 being used as were necessary to bring up the number of reference stars on the plate to ten. The star positions used were the observed positions, referred to the equinox 1900. From these the standard co-ordinates (ξ, η) of each star were computed as shown above, and the connexion between (ξ, η) and the measured co-ordinates (x, y) assumed to be given by the relations (H. H. Turner, M.N. 54, 11, 1893)—

$$\begin{aligned}\xi &= x + ax + by + c \\ \eta &= y + dx + ey + f.\end{aligned}$$

For convenience the equations of condition were written in the form—

$$\begin{aligned}a'x + b'y + 10c' &= 100(\xi - x), \\ d'x + e'y + 10f' &= 100(\eta - y),\end{aligned}$$

the solution of the two sets of equations of condition being carried through simultaneously. Peters's Calculating Tables were used in the formation of the products and also in the solution of the normal equations. To enable the tables to be used conveniently, the co-efficients of the normal equations were adjusted so that the first co-efficient of each equation was reduced to four figures, without any loss of accuracy in the solution. In 1914, in discussing the question, Professor Eddington suggested that the

use of a rigid least square solution was unnecessary. At that time the formation of products, which for convenience had been allowed to advance considerably ahead of the solution of the equations, was nearly complete, but for the determination of the final constants it has been decided to replace the least square solution by equations formed by a suitable grouping of the stars. Before proceeding to the final solution, the provisional plate constants are used to detect any discrepancies between the co-ordinates as measured on the plate and as computed from the transit circle position. Any such discrepancies are being investigated. The discrepancies being removed, the values of—

$$\xi, x, \eta, y, \xi - x, \eta - y, \xi + \eta$$

for each star are written down and divided into four groups—

$$(1) x -, y -, (2) x +, y -, \\ (3) x -, y +, (4) x +, y +.$$

For each group separately the values of—

$$x, y, \xi - x, \eta - y, \xi + \eta$$

are summed, the column $\xi + \eta$ serving as a check.

Take the sum of the columns of the four groups—

- (i) with the original signs,
- (ii) with the signs of groups (1) and (3) changed throughout,
- (iii) with the signs of groups (1) and (2) changed throughout.

The order of the terms in the equations of condition is altered to—

$$c + ax + by = \xi - x, \\ f + dx + ey = \eta - y,$$

and since the values of a and e are about -0.0114 , the equations have been finally taken as—

$$10 c' + xa' + yb' = 100 (\xi - x + 0.01x), \\ 10 f' + xd' + ye' = 100 (\eta - y + 0.01y),$$

where—

$$a = -0.01 + 0.01a'; \quad b = 0.01b'; \quad c = 0.1c'; \\ d = 0.01d'; \quad e = -0.01 + 0.01e'; \quad f = 0.1f'.$$

The equations for solution are now formed thus—

- (1) Coeff. of c' (f') is $100 \times$ number of reference stars
- Coeff. of a' (d') $10 \times$ sum of x in (i)
- Coeff. of b' (e') $10 \times$ sum of y in (i)
- Absolute term for c', a', b' $1,000 \times$ sum of $(\xi - x + 0.01x)$ in (i)
- Absolute term for f', d', e' $1,000 \times$ sum of $(\eta - y + 0.01y)$ in (i)

in each case the coefficient being rounded off to the nearest unit.

- (2) Coeff. of c' (f') is $100 \times$ excess of number of stars with $x +$ over the number with $x -$.

The other coefficients are formed as in (1), but using (ii) instead of (i).

- (3) Coeff. of c' (f') is $100 \times$ excess of number of stars with $y +$ over the number with $y -$.

The other coefficients are formed as in (1), but using (iii) instead of (i).

To solve these equations, divide each by the coefficient of c' and subtract the first equation thus obtained from each of the other two. Divide each of the equations resulting from the subtraction by the coefficient of a' and again subtract, and the values of b', e' are obtained. The other quantities are got by substitution. The advantage of this arrangement of the equations is that two at any rate of the divisions can be done mentally. If the coefficient of c' in 2) or 3) is zero, as may frequently be the case, the corresponding equation is to be written as the first or second of the equations resulting from subtraction.

The complete determination of the final plate constants is not yet available, but the values will be published later.

THE IDENTIFICATION OF CPD STARS.

The first step in the identification was the formation of a manuscript copy of the CPD for the equinox 1900, for all stars of the Durchmusterung included in the Melbourne zone. This was arranged in a form very similar to the original. A series of diagrams was next prepared, in which the abscissae were ξ (scale $1' = 0.5$ inch), the ordinates δ (scale $1^\circ = 1.2$ inch), and on these a series of lines was drawn for each 10 secs. difference of hour angle, and defined by

$$\xi = \sin (\alpha - A) \cos \delta \cot 1'.$$

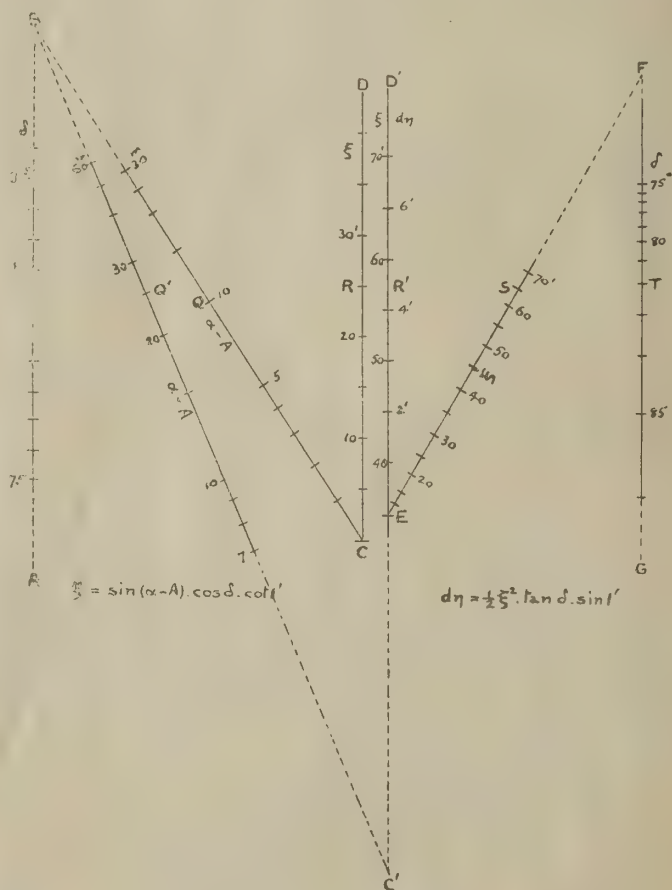
On the same diagram the approximate correction for curvature—

$$d\eta = \frac{1}{2} \xi^2 \tan \delta \sin 1'$$

was shown by a series of red lines, for each tenth of a minute in $d\eta$.

Separate sheets were prepared for each degree zone, the long strip being divided into three sections and mounted on card of a size convenient to use. Using these diagrams, the values of ξ and $d\eta$ can be quickly read off for each star.

Beyond -75° declination, the inclination of the lines ($\alpha - A$) constant became inconvenient, and between -75° and -85° the values of ξ and $d\eta$ were obtained from alignment charts of Z form, the parallel lines for the ξ chart being scales for ξ and δ , the other line $\alpha - A$, and in the $d\eta$ chart $d\eta$, δ , and ξ respectively.



To keep the chart for $\xi = \sin (\alpha - A) \cos \delta \cot 1'$ of suitable size, it was made in two sections. The scale for δ ($BP = 0.01 \cos \delta \cot 1' = 34.38 \cos \delta$) is laid off along BA for each $10'$, that for ξ (CR or $C'R' = 0.2 \xi$) along CD (ξ $0'$ to $35'$) and $C'D'$ (ξ $35'$ to $70'$) for each $1'$. The corresponding scales for $\alpha - A$ are laid off on BC and BC' respectively. The length of BC is 12,

and thus CQ is given by $\frac{2.4}{2 + 0.01 \operatorname{cosec} (\alpha - A)}$, ($\alpha - A$, 0 to 30^m)

and of BC' is 18, so that

$$BQ' = \frac{18}{1 + 20 \sin (\alpha - A)}, (\alpha - A, 7^m \text{ to } 60^m)$$

The intervals adopted for $\alpha - A$ were—For CB from 0 to 5^m, 10^s; from 5^m to 15^m, 30^s; from 15^m to 30^m, 1^m. For $C'B$ from 7^m to 20^m, 30^s; from 20^m to 60^m, 1^m. With this chart values of ξ could easily be obtained correct to 0'·2, and with care correct to 0'·1.

For $d\eta = \frac{1}{2} \xi^2 \tan \delta \sin 1'$, the scale for δ ($FT = 2,000 \tan \delta \sin 1' = .5818 \tan \delta$) is on FG for each 10', that for $d\eta$ ($ER' = d\eta$) on ED for each 0'·2, the zero of the $d\eta$ scale coinciding with 35' of the ξ scale. The corresponding scale for ξ is on EF .

The length EF is 10, and thus ES is given by $10 \frac{\xi^2}{\xi^2 + 4000}$ for each minute of ξ from 10' to 70'. Values of $d\eta$ correct to 0'·1 are easily obtained.

From -85° to the South Pole use has been made of the approximate formulae $\xi = p \sin(a - A)$,

$$\eta = (p - P) - p(1 - \cos \alpha - A)$$

where p, P are the South Polar Distances of the star and plate centre respectively. Three figure tables and Crelle's multiplication tables have been used as giving sufficient accuracy.

Using the values of ξ and $d\eta$ obtained as above, a manuscript was prepared giving the approximate standard rectangular co-ordinates of each CPD star on each of the plates on which it occurred. These were compared with the measured co-ordinates on the plate, the standard co-ordinates being increased by $\frac{1}{10}$ to correct for scale value of the plates, and thus the identification was readily effected.

THE RELATION BETWEEN DIAMETER AND MAGNITUDE.

Owing to the long interval of time over which the photographs of the different regions were taken, to the number of persons engaged on the measurement of the plates, and to the different machines employed, a considerable difference in the magnitude scale for different regions is to be expected.

A certain amount of control was exercised by the examination of the plates shortly after development. Thus in Mr. Baracchi's report for 1895-96 it is stated "three successive exposures of 5 minutes, 2½ minutes, and 20 seconds were invariably adopted for all catalogue plates, Oxford type charts, and plates on South Pole. Each plate was examined, in order to ascertain whether the setting and orientation were accurate, and whether the sensitiveness of the plate and the atmospheric transparency had been sufficient to allow stars of the 11th magnitude to give images of the required density. Negatives were accepted as satisfactory when the setting was found to be correct within 10" (this error was generally within 5"), and when the image of a 9th magnitude star on Argelander scale, obtained with 20 seconds' exposure, was such as to be accurately measureable.

The Oxford type regions were photographed on an average once a month for the purpose of controlling the scale of photographic magnitudes, in its relation to diameter of image and time of exposure, and the plates on the South Pole, which were secured on every observing night, are intended to assist in the reduction of this scale to an equal standard of transparency of the atmosphere. . . . For each batch of twelve dozen (plates), the quantity usually comprised in each separate order, tests were made on a few plates for relative sensitiveness and for determining the best time for development; the results obtained being accepted as applicable to all the rest of the batch. The quality of these plates is usually so constant that there has not been any reason for varying the time of exposure nor the time of development; this latter being six minutes."

Later, in the report for 1899-1900, he says:—

"Investigations of Photographic Magnitudes.

. . . the measuring or estimating, and recording diameters, as well as the concluded magnitudes, taking very special care, when several stars occur within a single réseau square, that the smallest

appreciable difference in their photographic magnitude is correctly shown by the records. If the observers were allowed to treat the magnitudes more roughly, the rate of progress of the work would be very considerably greater, as the actual measurement of the co-ordinates requires much less time than that occupied in the examination and comparison of the star images. I think, however, that this latter part of the work is of sufficient importance to justify the additional expenditure of the time which it involves."

So far as can be gathered, the diameters of all star images were measured on the plates dealt with in the early stages of the work, and the mean of two measures at right angles was taken as the diameter of the image. This mean was converted into seconds of arc, and then apparently the corresponding magnitude was obtained from a table. Many glaring discrepancies occur between the columns giving the seconds of arc and the magnitude. It would appear, too, that the data for constructing the conversion table rested on four photographs of regions for which Pritchard had assigned magnitudes from observations with the wedge photometer, but the stars used ranged only from magnitude 8·7 to 9·5 and from 10·7 to 11·3.

It was not long before the insertion of these magnitudes was given up, and, though the measurement of diameters was continued for the larger images, this procedure was replaced by estimation of diameters for the smaller. With the Slide machine, which had one moving wire only, all diameters over 4" (16 in the catalogue, where the unit is the quarter-second) were measured. With the machine Repsold 1, which had two parallel wires, diameters up to 6" (24) were estimated, and larger diameters measured. Repsold 2 has four parallel wires, and with it diameters up to 12"·5 (50) were estimated. In the early part of the work two other machines were used, and each diameter was measured, but the results were so discordant that I have rejected the whole of the diameters measured with them, and had them all redetermined on Repsold 2.

The magnitudes of the stars in the Melbourne plates with centres along -65° Declination have been dealt with by H. H. Turner (M.N. 77, p. 35, 1916), who shows that there is a decided systematic difference between the magnitude scales determined for the three instruments used for obtaining diameters. This result may, I think, be ascribed partly to the difference in the arrangement of wires and in the method of determining the diameter with the different machines, but probably the chief factor giving rise to the larger measured diameters with the machine S was the different intensity of field illumination—the field in S being considerably brighter than in either of the R machines. In addition, the observer at S faced the light, while the observer at R was turned from it.

In discussing the relation between diameter and magnitude, it is advisable, then, to deal with each machine separately. Counts were made for each plate in zones -65° and -66° of the number of stars to which each unit of diameter had been assigned. These were grouped according to the machine used and dealt with as Turner had done for zone -65° with slightly different data. It was found that for diameters greater than 16 on the Slide machine and 20 for the Repsold machines, the magnitude m can be obtained with fair accuracy from the given diameter d by an expression of the form—

$$m = m_0 - k\sqrt{d},$$

but below these limits the representation is not good, so that the expression could not be used for the great majority of the stars on the plates.

A graphical method was therefore adopted. Cumulative totals of the number of stars down to and including each fourth unit of diameter were formed for each machine for zones -65° and -66° separately, and the magnitude, as assigned by Chapman and Melotte, was determined. This magnitude m (ordinate) being plotted against the diameter d for each zone separately, the agreement between the pairs of curves for Repsold 1 and for

Repsold 2 is close, but for Slide the curve for -66° lies below that for -65° by a nearly constant amount from diameter 24 upwards, while for smaller diameters the curve rises steeply

and a small change in d would give a constant difference in m throughout. The data for the two zones have been combined in the table below.

d	Slide.				Repsold 1.				Repsold 2.			
	N'		log N.	Mag. C. & M.	N'		log N.	Mag. C. & M.	N'		log N.	Mag. C. & M.
	-65°	-66°			-65°	-66°			-65°	-66°		
52	43	39	.298	7.63	26	25	9.924	6.91	43	35	9.981	7.01
48	55	50	.405	7.34	42	45	.156	7.35	71	48	.165	7.37
44	81	68	.557	8.14	51	57	.250	7.53	91	65	.282	7.59
40	116	105	.729	8.50	75	91	.436	7.90	141	114	.496	8.32
36	162	145	.871	8.30	101	128	.576	8.18	228	190	.710	8.46
32	236	196	1.020	9.12	153	202	.773	8.59	331	264	.864	8.78
28	333	278	1.170	9.45	240	304	.952	8.97	430	352	.982	9.03
24	464	457	1.348	9.35	361	482	1.142	9.38	670	525	1.167	9.44
20	690	649	1.477	10.15	618	753	1.353	9.36	1234	1094	1.456	10.10
16	998	1116	1.709	10.70	1556	1878	1.752	10.31	2656	2055	1.762	10.33
12	2842	3128	2.160	11.35	4071	4337	2.141	11.80	6018	5520	2.151	11.33
9	7322	9115	2.600	13.10	11471	14323	2.628	13.19	17610	13424	2.581	13.05
Plates	16	20			25	28			39	32		

In this table, the columns headed N' give the total number of stars on the plates in that zone measured with the machine indicated, down to and including the diameter d . N is the average number of stars in four square degrees for the plates measured with the machine, the measured portion of the plate being a square whose side is $130 \times (1 - \frac{1}{87})$ minutes of arc.

Assuming that the stars measured on each machine can be taken as a fair sample of the whole sky, the magnitude determined by Chapman and Melotte for the different densities of distribution has been taken from the expanded table given by Turner (M.N. 75, 143, 1915). There is some duplication of regions on the same machine, but this is not very serious. For the Slide machine there are roughly 137 independent square degrees, 7 being duplicated. The corresponding numbers for the other machines are Repsold 1, 193 and 19; Repsold 2, 253 and 31. The distribution in R.A. is fairly uniform.

In these counts, diameter n will be assigned to all stars from diameter $n + .5$ to $n - .5$, so that the magnitude determined from the table of Chapman and Melotte will be that for diameter $n - .5$. Taking this into account, the values given in the table have been plotted and smooth curves drawn, the average departure of the points from the curve for the three machines being—

$$.024, \quad \pm .033, \quad \pm .043 \text{ mag. respectively.}$$

From the curves the average magnitude corresponding to each unit of d on the average plate for each machine has been read off, and is given in table VIII. at the end of this Introduction.

To obtain the correction which must be applied to the magnitudes on each plate to reduce them to the magnitudes on the average plate, use has been made of the CPD stars on the plate. E. C. Pickering (Harvard Annals 80 No. 13) has investigated the magnitudes of the Cape Photographic Durchmusterung, and has determined—

- (1) the corrected scale of the CPD,
- (2) the correction to be applied to the magnitudes on each plate to reduce to the average plate.

For each plate in the present volume the recorded magnitude of each CPD star has been reduced to the International Scale by the application of these corrections, and compared with the magnitude corresponding to the diameter, as given by the table connecting diameter and mean magnitude. The CPD stars with the smallest diameter on each plate have been excluded from this comparison, as there will be a decided tendency for these stars to be brighter than the mean magnitude corresponding to that diameter on the plate, and thus their inclusion would be likely to give rise to a systematic error.

The mean of the differences (I.S. — Table) for all the other CPD stars on the plate whose CPD magnitude lies between 6.0

and 10.6 inclusive has been taken as the correction which must be applied to the tabular magnitude of the stars on that plate to reduce to the International Scale. These corrections are given in the final column of table IX. giving particulars of the plates in this volume.

PERSONNEL.

Mr. R. L. J. Ellery, Government Astronomer until 30th June, 1895, supervised the erection of the telescope and the initiation of the photographic part of the work, and made arrangements for the selection of the stars on the plate which comprised the original list of reference stars.

Mr. P. Baracchi, Assistant to 30th September, 1892; then Chief Assistant, and, after Mr. Ellery's retirement, Government Astronomer until 31st August, 1915, assisted in the supervision in the earlier part of the undertaking, carried on the photographic programme on the lines laid down by Mr. Ellery, and made all plans in connexion with the measurement of the plates.

Dr. J. M. Baldwin, Chief Assistant from 1st June, 1908, until Mr. Baracchi's retirement, and afterwards Government Astronomer, was placed in charge of the work on his arrival, and has remained in immediate supervision since then. He drew up all the tables and carried out all special investigations necessary for the complete reduction of the measures, made all arrangements as to the form of publication, and carried out a revision of the work previously done.

Mr. W. J. Wallace, Assistant until his death on 28th December, 1907, took practically all the plates until his death, and was in charge of the measuring bureau.

Mr. F. Kemp, Photographic Assistant until 11th April, 1914, developed all the earlier plates. Since his retirement the development has been done generally by the observer.

Mr. G. F. Johns, Temporary Assistant from 28th April, 1908, until his death on 16th January, 1913, acted as observer and also assisted in the computing and special work, such as the selection of additional reference stars.

Mr. G. W. Cornell, Photographic Assistant from 8th September, 1914, to 30th January, 1918, assisted in the observing and computations.

Mr. W. R. Treharne, Junior Assistant from 3rd August, 1914, to 1st July, 1920, has assisted in the reduction, and also a little in the observing and in the measurement of plates.

Mr. J. B. O. Hosking, Physicist from 1st September, 1921, to 18th June, 1923, and Mr. W. M. Holmes, Physicist from 1st February, 1924, onwards, have acted as observers with the astrographic telescope.

In addition to the above, the following ladies have been engaged on the work of reduction. Those who have taken part in the measurement of the plates also are indicated by an initial or initials, by which they are designated in Table IX. giving particulars of the plates.

Up to the middle of 1909 the work carried out by these ladies consisted in the measurement of the plates, the measures being expressed in réseau intervals. Since that time they have shared

in the general computing in connexion with the reduction of the plates, and in the preparation of the catalogue. This work has included the reduction of the measures to millimetres (minutes of arc approximately), arrangement in order of the x co-ord. for each half plate, computation of standard co-ordinates for the reference stars, determination of the plate constants, identification of the CPD stars on the plates, counts of stars for determination of magnitude, proof reading, &c.

	Date of Service.	Designation.
Miss C. E. Peel ..	1 Nov., 1898, to 14 Nov., 1918 ..	P
„ E. Harker ..	1 Nov., 1898, to 31 Mar., 1903 ..	H
„ L. E. Lewis ..	1 Nov., 1898, to 30 June, 1903 } ..	L
	2 Jan., 1924, onwards }	
„ H. F. Skoglund ..	1 Nov., 1898, to 30 Nov., 1901 ..	S
„ M. A. Phillips ..	1 Nov., 1898, to 31 Mar., 1903 ..	MP
„ J. W. Hall ..	1 Nov., 1898, to 4 Feb., 1901 ..	WH
„ M. Suthmier ..	12 Feb., 1901, to 21 July, 1902 ..	MS
„ E. Langley ..	2 Dec., 1901, to 31 Mar., 1903 ..	EL
„ R. Rayson ..	2 Dec., 1901, to 30 Sept., 1904 } ..	R
	1 June, 1905, to 9 Oct., 1906 }	
„ E. Sheldon ..	17 Sept., 1902, to 1 Dec., 1911 ..	ES
„ E. Watts ..	26 April, 1904, to 18 April, 1905 ..	
„ B. C. Scott ..	9 May, 1904, to 26 Feb., 1907 ..	BS
„ M. C. Greer ..	9 May, 1904, to 31 May, 1905 ..	G
„ A. Alexander ..	31 Jan., 1905, to 1 Sept., 1909 ..	A
„ I. Trigge ..	31 Jan., 1905, to 15 May, 1909 ..	T
„ E. Hockin ..	1 May, 1905, to 2 Feb., 1909 } ..	EH
	10 May, 1909, to 14 July, 1911 }	

	Date of Service.	Designation.
Miss H. M. Browne ..	28 Nov., 1906, to 9 Mar., 1912 ..	HB
„ M. A. Heagney ..	28 Nov., 1906, to 14 Aug., 1910 ..	MH
„ V. Noonan ..	1 May, 1907, to 14 April, 1909 ..	N
„ G. M. Moore ..	1 Sept., 1909, to 24 Dec., 1912 ..	GM
„ G. O'Donnell ..	1 Sept., 1909, to 30 June, 1911 ..	O
„ N. E. McKay ..	20 Sept., 1909, to 28 Feb., 1911 ..	M
„ C. Frayne ..	15 Sept., 1911, to 14 Dec., 1912 ..	F
„ W. Appleton ..	1 June, 1912, to 27 Aug., 1915	
„ J. Yoxon ..	12 May, 1913, to 11 May, 1915	
„ K. Byrne ..	1 July, 1914, to 15 May, 1916	
„ M. Danby ..	5 Aug., 1914, to 15 May, 1915	
„ J. C. Prigg ..	13 Dec., 1923, onwards	
„ L. B. Macpherson ..	1 Dec., 1924, onwards	
„ S. Fetherstonhaugh	1 Dec., 1924, to 30 June, 1925	
„ L. M. Lloyd ..	10 Dec., 1924, onwards	
„ I. Wallace ..	10 Dec., 1924, to 30 June, 1925	
„ M. Justice ..	10 Dec., 1924, onwards	

J. M. BALDWIN.

TABLES FOR THE CONVERSION OF STANDARD CO-ORDINATES INTO R.A. AND DEC.

$$(d - D)' = \eta' + \text{I.}$$

$$\log a_s = \log \xi' + \log \sec d + \text{II.}$$

$$(\alpha - A)_s = a_s + \text{III.}$$

$$\log (d - \delta)' = \log \sin d + \log \cos d + 2 \log a_s + \text{IV} + \text{V.}$$

(Introduction, p. xviii.)

These tables will give an accuracy corresponding to $\cdot 001$ and can be used for values of δ up to $\pm 86^\circ$. They may, indeed, be used beyond these limits, provided $\alpha - A$ does not exceed 1^h . An example of the use of the tables is given.

CONVERSION OF MEASURED CO-ORDINATES INTO R.A. AND DEC.

a — $\cdot 01135$ d + $\cdot 00030$ Plate Centre—A 0h 30m, D — 85° .
b — $\cdot 00014$ e — $\cdot 01121$
c + $\cdot 1182$ f — $\cdot 0448$ Plate

—	STAR.	—
1	x	—54° 523
2	ax	+° 6188
3	by	+° 77
4	(1)..(3) + c = ξ'	—53° 778
5	y	—55° 276
6	dx	— 164
7	ey	+° 6197
8	(5)..(7) + f = η'	—54° 718
9	I	+° 5
10	(8) + (9) = d — D	—54° 42' 78
11	d	—85° 54' 42' 78
12	log ξ'	1° 730605
13	log sec d	1° 146968
14	II	° 602005
15	(12)..(14) = log a_s	3° 479578
16	a_s	—3017° 02
17	III	+° 48° 06
18	(16) + (17) = $\alpha - A$	—2969° 96
19	α	h m s 23 40 30° 04
20	log sin d	9° 99889
21	log cos d	8° 853032
22	2 × (15)	6° 95916
23	IV	4° 94852
24	V	° 00487
25	(20)..(24) = log (d — δ)	0° 76447
26	d — δ	—5° 814
27	d — δ'	—5° 48' 84
28	δ	—85° 48' 53' 9

POLAR CAP.

For the polar cap, plate centres -85° to -90° , table VI may be used, as shown in the following example. The same star is chosen as was used to illustrate the previous method of reduction, and the results show the close agreement between the two methods :—

CONVERSION OF MEASURED CO-ORDINATES INTO R.A. AND DEC.—POLAR CAP.

a — $\cdot 01135$ d + $\cdot 00030$ $c_1 = \log (-\operatorname{cosec} D) = \cdot 001656$
b — $\cdot 00014$ e — $\cdot 01121$ $c_2 = -k \cot D = +300\cdot 764$
c + $\cdot 1182$ f — $\cdot 0448$ $c_3 = 6\cdot 463726$

Plate Centre—A 0h 30m, D — 85° .

Plate

—	STAR.	—
1	x	—54° 523
2	ax	+° 6188
3	by	+° 77
4	(1)..(3) + c = ξ'	—53° 778
5	y	—55° 276
6	dx	— 164
7	ey	+° 6197
8	(5)..(7) + f = η'	—54° 718
9	$\eta' + c_2$	+246° 046
10	log ξ'	1° 730605
11	VI	9° 999396
12	log (9)	2° 391016
13	(10) + (11) + $c_1 = \log \xi'_o$	1° 731657
14	(11) + (12) = log η'_o	2° 390412
15	(13) — (14) = log tan ($\alpha - A$)	9° 341245
16	$\alpha - A$ ° ' "	—12° 22' 29" 5
17	$\alpha - A$ h m s	—49 29° 97
18	α	h m s 23 40 30° 03
19	log sec ($\alpha - A$)	0° 010209
20	(14) + (19) + $c_3 = \log (-\cot \delta)$	8° 864347
21	δ	—85° 48' 54" 0

$$I = -2.820 \times 10^{-8} \eta^3. \quad IV = \bar{6}.948576 - 1.8374 \times 10^{-8} \xi^2.$$

Sign opposite to η' .

Sign always +.

η'	I	ξ'	IV
	.000		$\bar{6}.94858$
26.08	1	7.38	7
37.61	2	24.47	6
44.59	3	33.81	5
49.88	4	41.08	4
54.24	5	47.24	3
57.99	6	52.68	2
61.31	7	57.62	1
64.31	8	62.16	0
67.05		66.55	

$$II = .6020600 - 1.8374 \times 10^{-8} \eta^2.$$

Sign always +.

η'	II	η'	II	η'	II
5.22	.602060	38.69	.602032	54.46	.602005
9.04	59	39.38	31	.96	.04
11.66	58	40.07	30	55.45	03
13.80	57	.74	29	.94	02
15.65	56	41.41	28	56.43	01
17.30	55	42.06	27	.91	00
18.81	54	.70	26	57.38	.601999
20.20	53	43.33	25	.85	98
21.51	52	.96	24	58.32	97
22.74	51	44.57	23	.79	96
23.91	50	45.18	22	59.25	95
25.02	49	.78	21	.71	94
26.08	48	46.37	20	60.16	93
27.11	47	.95	19	.61	92
28.09	46	47.52	18	61.06	91
29.04	45	48.09	17	.50	90
.97	44	.66	16	.94	89
30.86	43	49.21	15	62.38	88
31.73	42	.76	14	.82	87
32.58	41	50.31	13	63.25	86
33.40	40	.84	12	.68	85
34.21	39	51.38	11	64.10	84
.99	38	.90	10	.53	83
35.76	37	52.42	09	.95	82
36.52	36	.94	08	65.36	81
37.25	35	53.45	07	.78	80
.98	34	.96	06	66.19	
38.69	33	54.46			

TABLE VII.—REFRACTION.

(Introduction, p. xix.)

Zone.	Effect in ξ .	Effect in η .	Zone.	Effect in ξ .	Effect in η .
-65°	$4\xi\eta$	$4\xi^2 + 10\eta^2$	-78°	$7\xi\eta$	$7\xi^2 + 19\eta^2$
-66	$5\xi\eta$	$5\xi^2 + 10\eta^2$	-79	$7\xi\eta$	$7\xi^2 + 20\eta^2$
-67	$5\xi\eta$	$5\xi^2 + 11\eta^2$	-80	$8\xi\eta$	$8\xi^2 + 22\eta^2$
-68	$5\xi\eta$	$5\xi^2 + 11\eta^2$	-81	$8\xi\eta$	$8\xi^2 + 23\eta^2$
-69	$5\xi\eta$	$5\xi^2 + 12\eta^2$	-82	$8\xi\eta$	$8\xi^2 + 24\eta^2$
-70	$5\xi\eta$	$5\xi^2 + 13\eta^2$	-83	$8\xi\eta$	$8\xi^2 + 26\eta^2$
-71	$5\xi\eta$	$5\xi^2 + 13\eta^2$	-84	$9\xi\eta$	$9\xi^2 + 27\eta^2$
-72	$6\xi\eta$	$6\xi^2 + 14\eta^2$	-85	$9\xi\eta$	$9\xi^2 + 29\eta^2$
-73	$6\xi\eta$	$6\xi^2 + 14\eta^2$	-86	$9\xi\eta$	$9\xi^2 + 31\eta^2$
-74	$6\xi\eta$	$6\xi^2 + 15\eta^2$	-87	$10\xi\eta$	$10\xi^2 + 33\eta^2$
-75	$6\xi\eta$	$6\xi^2 + 16\eta^2$	-88	$10\xi\eta$	$10\xi^2 + 35\eta^2$
-76	$7\xi\eta$	$7\xi^2 + 17\eta^2$	-89	$10\xi\eta$	$10\xi^2 + 37\eta^2$
-77	$7\xi\eta$	$7\xi^2 + 18\eta^2$	-90	$11\xi\eta$	$11\xi^2 + 39\eta^2$

The effects are for the second order terms for hour angle 0^h . ξ and η are in minutes of arc, and the effects in minutes $\times 10^{-8}$.

TABLE VIII.—DIAMETER AND MEAN MAGNITUDE.

(Introduction, p. xxii.)

d	S.	R1.	R2.	d	S.	R1.	R2.
9	12.87	12.92	12.81	31	9.16	8.63	8.78
10	12.41	12.43	12.38	32	9.08	8.54	8.69
11	12.00	11.99	12.00	33	9.00	8.44	8.60
12	11.64	11.65	11.68	34	8.91	8.35	8.51
13	11.31	11.36	11.40	35	8.83	8.27	8.42
14	11.02	11.08	11.14	36	8.75	8.18	8.33
15	10.78	10.82	10.90	37	8.67	8.09	8.25
16	10.60	10.58	10.68	38	8.59	8.01	8.16
17	10.45	10.37	10.47	39	8.51	7.92	8.07
18	10.33	10.17	10.29	40	8.43	7.84	7.99
19	10.22	9.99	10.12	41	8.36	7.76	7.91
20	10.12	9.83	9.97	42	8.29	7.68	7.82
21	10.03	9.69	9.83	43	8.21	7.60	7.73
22	9.93	9.56	9.71	44	8.14	7.52	7.65
23	9.85	9.44	9.59	45	8.06	7.44	7.56
24	9.76	9.32	9.47	46	7.99	7.36	7.48
25	9.68	9.22	9.35	47	7.91	7.28	7.40
26	9.59	9.12	9.25	48	7.84	7.21	7.31
27	9.50	9.02	9.16	49	7.76	7.14	7.22
28	9.41	8.92	9.06	50	7.69	7.06	7.14
29	9.33	8.82	8.96	51	7.62	6.99	7.06
30	9.24	8.72	8.87	52	7.54	6.91	6.98

$$\text{III} = -1.76283 \times 10^{-9} a_s^2 + 5.594 \times 10^{-18} a_s^5 - 2.113 \times 10^{-26} a_s^7 + \dots$$

Sign opposite to a_s .

a_s	III	a_s	III	a_s	III	a_s	III	a_s	III	a_s	III
0	^s 0.000	600	^s 0.381	1200	^s 3.032	1800	^s 10.18	2400	^s 23.93	3000	^s 46.28
10	000	610	400	1210	109	1810	10.35	2410	24.23	3010	46.74
20	000	620	420	1220	186	1820	10.52	2420	24.53	3020	47.20
30	000	630	440	1230	265	1830	10.69	2430	24.83	3030	47.66
40	000	640	461	1240	345	1840	10.87	2440	25.14	3040	48.12
50	0.000	650	0.483	1250	3.426	1850	11.04	2450	25.44	3050	48.59
60	000	660	506	1260	509	1860	11.22	2460	25.75	3060	49.06
70	001	670	529	1270	593	1870	11.40	2470	26.06	3070	49.53
80	001	680	553	1280	678	1880	11.58	2480	26.38	3080	50.01
90	001	690	578	1290	764	1890	11.77	2490	26.69	3090	50.49
100	0.002	700	0.604	1300	3.852	1900	11.95	2500	27.01	3100	50.97
110	002	710	630	1310	942	1910	12.14	2510	27.33	3110	51.46
120	003	720	657	1320	4.032	1920	12.33	2520	27.66	3120	51.94
130	004	730	685	1330	124	1930	12.53	2530	27.98	3130	52.44
140	005	740	713	1340	218	1940	12.72	2540	28.31	3140	52.93
150	0.006	750	0.742	1350	4.312	1950	12.92	2550	28.64	3150	53.43
160	007	760	772	1360	408	1960	13.11	2560	28.98	3160	53.93
170	009	770	803	1370	506	1970	13.31	2570	29.31	3170	54.43
180	010	780	835	1380	605	1980	13.52	2580	29.65	3180	54.94
190	012	790	867	1390	705	1990	13.72	2590	29.99	3190	55.44
200	0.014	800	0.901	1400	4.807	2000	13.93	2600	30.34	3200	55.96
210	016	810	935	1410	911	2010	14.13	2610	30.68	3210	56.47
220	019	820	970	1420	5.016	2020	14.34	2620	31.03	3220	56.99
230	021	830	1.006	1430	122	2030	14.56	2630	31.38	3230	57.51
240	024	840	042	1440	230	2040	14.77	2640	31.74	3240	58.04
250	0.028	850	1.080	1450	5.339	2050	14.99	2650	32.09	3250	58.56
260	031	860	119	1460	450	2060	15.21	2660	32.45	3260	59.09
270	035	870	158	1470	562	2070	15.43	2670	32.81	3270	59.63
280	039	880	198	1480	675	2080	15.65	2680	33.18	3280	60.16
290	043	890	240	1490	790	2090	15.87	2690	33.55	3290	60.70
300	0.048	900	1.282	1500	5.907	2100	16.10	2700	33.92	3300	61.25
310	053	910	325	1510	6.026	2110	16.33	2710	34.29	3310	61.79
320	058	920	369	1520	146	2120	16.56	2720	34.66	3320	62.34
330	063	930	414	1530	267	2130	16.79	2730	35.04	3330	62.90
340	069	940	460	1540	390	2140	17.03	2740	35.42	3340	63.45
350	0.076	950	1.507	1550	6.515	2150	17.27	2750	35.81	3350	64.01
360	082	960	555	1560	641	2160	17.51	2760	36.19	3360	64.57
370	089	970	604	1570	769	2170	17.75	2770	36.58	3370	65.14
380	097	980	654	1580	899	2180	17.99	2780	36.97	3380	65.70
390	105	990	705	1590	7.030	2190	18.24	2790	37.37	3390	66.28
400	0.113	1000	1.757	1600	7.162	2200	18.49	2800	37.76	3400	66.85
410	121	1010	810	1610	297	2210	18.74	2810	38.16	3410	67.43
420	130	1020	865	1620	433	2220	18.99	2820	38.56	3420	68.01
430	140	1030	920	1630	571	2230	19.25	2830	38.97	3430	68.59
440	150	1040	976	1640	710	2240	19.50	2840	39.38	3440	69.18
450	0.160	1050	2.034	1650	7.851	2250	19.76	2850	39.79	3450	69.77
460	171	1060	092	1660	994	2260	20.03	2860	40.20	3460	70.37
470	183	1070	152	1670	8.138	2270	20.29	2870	40.62	3470	70.96
480	195	1080	212	1680	285	2280	20.56	2880	41.04	3480	71.56
490	207	1090	274	1690	433	2290	20.82	2890	41.46	3490	72.17
500	0.220	1100	2.337	1700	8.582	2300	21.10	2900	41.88	3500	72.77
510	234	1110	402	1710	734	2310	21.37	2910	42.31	3510	73.38
520	248	1120	467	1720	887	2320	21.64	2920	42.74	3520	74.00
530	262	1130	533	1730	9.042	2330	21.92	2930	43.17	3530	74.61
540	277	1140	601	1740	198	2340	22.20	2940	43.61	3540	75.23
550	0.293	1150	2.670	1750	9.357	2350	22.49	2950	44.05	3550	75.86
560	309	1160	740	1760	517	2360	22.77	2960	44.49	3560	76.48
570	326	1170	811	1770	679	2370	23.06	2970	44.93	3570	77.11
580	344	1180	884	1780	843	2380	23.35	2980	45.38	3580	77.75
590	362	1190	957	1790	10.009	2390	23.64	2990	45.83	3590	78.38
600	0.381	1200	3.032	1800	10.176	2400	23.93	3000	46.28	3600	79.02

$$V = 0.01000 - 5.742 \times 10^{-10} a_s^2 + 1.139 \times 10^{-18} a_s^4 - 3.3 \times 10^{-27} a_s^6 + \dots$$

Sign always +.

a_s	V	a_s	V	a_s	V	a_s	V	a_s	V	a_s	V
0	·01000	600	·00979	1200	·00918	1800	·00815	2400	·00673	3000	·00492
10	00	610	79	1210	16	1810	13	2410	70	3010	89
20	00	620	78	1220	15	1820	11	2420	68	3020	86
30	00	630	77	1230	13	1830	09	2430	65	3030	82
40	00	640	76	1240	12	1840	07	2440	62	3040	79
50	·01000	650	·00976	1250	·00911	1850	·00805	2450	·00659	3050	·00475
60	00	660	75	1260	09	1860	03	2460	57	3060	72
70	00	670	74	1270	08	1870	01	2470	54	3070	69
80	00	680	73	1280	06	1880	·00798	2480	51	3080	65
90	·01000	690	73	1290	05	1890	96	2490	48	3090	62
100	·00999	700	·00972	1300	·00903	1900	·00794	2500	·00645	3100	·00458
110	99	710	71	1310	02	1910	92	2510	43	3110	55
120	99	720	70	1320	00	1920	90	2520	40	3120	52
130	99	730	69	1330	·00899	1930	88	2530	37	3130	48
140	99	740	69	1340	97	1940	85	2540	34	3140	45
150	·00999	750	·00968	1350	·00896	1950	·00783	2550	·00631	3150	·00441
160	99	760	67	1360	94	1960	81	2560	28	3160	38
170	98	770	66	1370	93	1970	79	2570	26	3170	34
180	98	780	65	1380	91	1980	77	2580	23	3180	31
190	98	790	64	1390	89	1990	74	2590	20	3190	27
200	·00998	800	·00963	1400	·00888	2000	·00772	2600	·00617	3200	·00424
210	97	810	62	1410	86	2010	70	2610	14	3210	20
220	97	820	61	1420	85	2020	68	2620	11	3220	17
230	97	830	60	1430	83	2030	65	2630	08	3230	13
240	97	840	60	1440	81	2040	63	2640	05	3240	09
250	·00996	850	·00959	1450	·00880	2050	·00761	2650	·00602	3250	·00406
260	96	860	58	1460	78	2060	58	2660	·00599	3260	02
270	96	870	57	1470	76	2070	56	2670	96	3270	·00399
280	95	880	56	1480	75	2080	54	2680	93	3280	95
290	95	890	55	1490	73	2090	51	2690	90	3290	92
300	·00995	900	·00954	1500	·00871	2100	·00749	2700	·00587	3300	·00388
310	94	910	53	1510	70	2010	47	2710	84	3310	84
320	94	920	51	1520	68	2120	44	2720	81	3320	80
330	94	930	50	1530	66	2130	42	2730	78	3330	77
340	93	940	49	1540	64	2140	39	2740	75	3340	73
350	·00993	950	·00948	1550	·00862	2150	·00737	2750	·00572	3350	·00369
360	93	960	47	1560	61	2160	35	2760	69	3360	66
370	92	970	46	1570	59	2170	32	2770	66	3370	62
380	92	980	45	1580	57	2180	30	2780	63	3380	58
390	91	990	44	1590	56	2190	27	2790	60	3390	55
400	·00991	1000	·00943	1600	·00854	2200	·00725	2800	·00557	3400	·00351
410	90	1010	42	1610	52	2210	22	2810	54	3410	47
420	90	1020	40	1620	50	2220	20	2820	50	3420	43
430	89	1030	39	1630	48	2230	17	2830	47	3430	40
440	89	1040	38	1640	46	2240	15	2840	44	3440	36
450	·00988	1050	·00937	1650	·00845	2250	·00712	2850	·00541	3450	·00332
460	88	1060	36	1660	43	2260	10	2860	38	3460	28
470	87	1070	34	1670	41	2270	07	2870	35	3470	25
480	87	1080	33	1680	39	2280	05	2880	31	3480	21
490	86	1090	32	1690	37	2290	02	2890	28	3490	17
500	·00986	1100	·00931	1700	·00835	2300	·00699	2900	·00525	3500	·00313
510	85	1110	29	1710	33	2310	97	2910	22	3510	09
520	84	1120	28	1720	31	2320	94	2920	18	3520	05
530	84	1130	27	1730	29	2330	92	2930	15	3530	02
540	83	1140	26	1740	27	2340	89	2940	12	3540	·00298
550	·00983	1150	·00924	1750	·00825	2350	·00686	2950	·00509	3550	·00294
560	82	1160	23	1760	23	2360	84	2960	05	3560	90
570	81	1170	22	1770	21	2370	81	2970	02	3570	86
580	81	1180	20	1780	19	2380	78	2980	·00499	3580	82
590	80	1190	19	1790	17	2390	76	2990	96	3590	78
600	·00979	1200	·00918	1800	·00815	2400	·00673	3000	·00492	3600	·00274

TABLE VI.—CONVERSION OF STANDARD CO-ORDINATES TO R.A. AND DEC.

POLAR CAP.

$$\tan(\alpha - A) = \xi'_0 / \eta'_0; \quad -\cot \delta = \eta'_0 \cdot \tan l' \cdot \sec(\alpha - A).$$

(Introduction, p. xviii.)

ZONE - 89°.

$$\log \xi'_0 = \log \xi' + \cdot 000066 + \text{correction (argument } \eta').$$

$$\log \eta'_0 = \log(\eta' + 60' \cdot 006) + \text{correction (argument } \eta').$$

η'	0	1	2	3	4	5	6	7	8	9
-60	1·999 868	866	863	861	859	857	..	..	..	..
-50	890	888	885	883	881	879	877	874	872	870
-40	912	910	907	905	903	901	899	896	894	892
-30	934	932	929	927	925	923	921	918	916	914
-20	956	954	952	949	947	945	943	940	938	936
-10	978	976	974	971	969	967	965	963	960	958
-0	—	998	996	993	991	989	987	985	982	980
+0	0·000 000	002	004	007	009	011	013	015	018	020
+10	022	024	026	029	031	033	035	037	040	042
+20	044	046	049	051	053	055	057	060	062	064
+30	066	068	071	073	075	077	079	082	084	086
+40	088	090	093	095	097	099	101	104	106	108
+50	110	112	115	117	119	121	123	126	128	130
+60	132	135	137	139	141	143	..	..	..	..

ZONE - 88°.

$$\log \xi'_0 = \log \xi' + \cdot 000265 + \text{correction (argument } \eta').$$

$$\log \eta'_0 = \log(\eta' + 120' \cdot 049) + \text{correction (argument } \eta').$$

η'	0	1	2	3	4	5	6	7	8	9
-60	1·999 735	731	727	722	718	713	..	..	..	..
-50	779	775	771	766	762	757	753	749	744	740
-40	824	819	815	810	806	802	797	793	788	784
-30	868	863	859	854	850	846	841	837	832	828
-20	912	907	903	899	894	890	885	881	876	872
-10	956	951	947	943	938	934	929	925	921	916
-0	—	996	991	987	982	978	974	969	965	960
+0	0·000 000	004	009	013	018	022	026	031	035	040
+10	044	049	053	057	062	066	071	075	079	084
+20	088	093	097	101	106	110	115	119	124	128
+30	132	137	141	146	150	154	159	163	168	172
+40	176	181	185	190	194	199	203	207	212	216
+50	221	225	229	234	238	243	247	252	256	260
+60	265	269	274	278	282	287	..	..	..	..

ZONE - 87°.

$$\log \xi'_0 = \log \xi' + \cdot 000596 + \text{correction (argument } \eta').$$

$$\log \eta'_0 = \log(\eta' + 180' \cdot 165) + \text{correction (argument } \eta').$$

η'	0	1	2	3	4	5	6	7	8	9
-60	1·999 603	596	590	583	576	570	..	..	..	..
-50	669	662	656	649	643	636	629	623	616	610
-40	735	729	722	715	709	702	696	689	682	676
-30	801	795	788	782	775	768	762	755	748	742
-20	868	861	854	848	841	835	828	821	815	808
-10	934	927	921	914	907	901	894	887	881	874
-0	—	993	987	980	974	967	960	954	947	940
+0	0·000 000	007	013	020	026	033	040	046	053	060
+10	066	073	079	086	093	099	106	113	119	126
+20	132	139	146	152	159	166	172	179	185	192
+30	199	205	212	219	225	232	238	245	252	258
+40	265	272	278	285	291	298	305	311	318	325
+50	331	338	344	351	358	364	371	378	384	391
+60	397	404	411	417	424	431	..	..	..	..

ZONE - 86°.

$$\log \xi'_0 = \log \xi' + \cdot 001059 + \text{correction (argument } \eta').$$

$$\log \eta'_0 = \log(\eta' + 240' \cdot 391) + \text{correction (argument } \eta').$$

η'	0	1	2	3	4	5	6	7	8	9
-60	1·999 470	461	453	444	435	426	..	..	..	..
-50	559	550	541	532	523	514	506	497	488	479
-40	647	638	629	620	611	603	594	585	576	567
-30	735	726	717	709	700	691	682	673	664	656
-20	823	815	806	797	788	779	770	762	753	744
-10	912	903	894	885	876	868	859	850	841	832
-0	—	991	982	974	965	956	947	938	929	921
+0	0·000 000	009	018	026	035	044	053	062	071	079
+10	088	097	106	115	124	133	141	150	159	168
+20	177	186	194	203	212	221	230	239	247	256
+30	265	274	283	292	300	309	318	327	336	345
+40	354	362	371	380	389	398	407	415	424	433
+50	442	451	460	468	477	486	495	504	513	522
+60	530	539	548	557	566	575	..	..	..	..

ZONE - 85°.

$$\log \xi'_0 = \log \xi' + \cdot 001656 + \text{correction (argument } \eta').$$

$$\log \eta'_0 = \log(\eta' + 300' \cdot 764) + \text{correction (argument } \eta').$$

η'	0	1	2	3	4	5	6	7	8	9
-60	1·999 337	326	315	304	293	282	..	..	..	..
-50	448	437	426	415	404	393	382	370	359	348
-40	558	547	536	525	514	503	492	481	470	459
-30	669	658	646	635	624	613	602	591	580	569
-20	779	768	757	746	735	724	713	702	691	680
-10	889	878	867	856	845	834	823	812	801	790
-0	—	989	978	967	956	945	934	923	912	901
+0	0·000 000	011	022	033	044	055	066	077	088	099
+10	111	122	133	144	155	166	177	188	199	210
+20	221	232	243	254	265	276	287	299	310	321
+30	332	343	354	365	376	387	398	409	420	431
+40	442	453	464	476	487	498	509	520	531	542
+50	553	564	575	586	597	608	619	630	642	653
+60	664	675	686	697	708	719	..	..	..	..

TABLE IX.—PARTICULARS OF THE PLATES IN VOL. I.

ZONE — 65°.

R.A.	Plate.	Exposed—		H.A.	Réseau.	Measured—		Mic.	Mag. Corr.
		On.	By.			In.	By.		
h m				m					
0 9	460	1892 Oct. 11	W	3 W	G 33	1911 Aug.	HB, GM	R1	— 0.6
0 27	814	1893 Oct. 30	W	2 W	M 6	1899 Dec.	L, L	*M	+ 0.2
0 45	815	1893 Oct. 30	W	2 E	M 6	1899 Dec.	P, P	*M	+ 0.1
1 3	488	1892 Nov. 12	W	2 E	G 27	1899 Dec.	H, H	*C	— 0.5
1 21	4009	1915 Nov. 26	B	11 E	M 23	1915 Dec.	P, P	R2	+ 0.6
1 39	1754	1897 Nov. 25	W	6 W	M 23	1908 Dec.	T, MH	S	+ 0.9
1 57	841	1893 Dec. 8	W	3 E	M 6	1912 May	P, P	R2	+ 0.3
2 15	852	1893 Dec. 9	W	3 W	M 6	1900 Feb.	MP, MP	*C	— 0.4
2 33	508	1892 Nov. 15	W	7 E	G 27	1900 Nov.	P, P	R1	— 0.6
2 51	525	1892 Nov. 21	W	1 E	G 27	1900 Nov.	L, P	R1	— 0.2
3 9	529	1892 Dec. 19	W	0	G 27	1900 Nov.	L, P	R1	— 0.2
3 27	530	1892 Dec. 19	W	3 E	G 27	1900 Nov.	L, P	R1	— 0.0
3 45	531	1892 Dec. 19	W	5 E	G 27	1900 Nov.	WH, WH	*C	— 0.0
4 3	532	1892 Dec. 19	W	8 E	G 27	1900 Nov.	L, P	R1	— 0.0
4 21	533	1892 Dec. 19	W	9 E	G 27	1900 Nov.	MP, MP	*C	— 0.1
4 39	1184	1894 Dec. 19	W	3 E	M 23	1900 Nov.	L, P	R1	+ 0.7
4 57	543	1892 Dec. 20	W	1 E	G 27	1900 Nov.	L, P	R1	+ 0.1
5 15	544	1892 Dec. 20	W	5 E	G 27	1900 Dec.	L, P	S	+ 0.1
5 33	136	1892 Jan. 30	W	5 W	G 33	1900 Dec.	L, P	S	+ 0.2
5 51	557	1893 Jan. 9	W	3 W	G 27	1900 Nov.	S, H	S	— 0.2
6 9	598	1893 Feb. 8	W	0	M 6	1908 Aug.	A, HB	R1	— 0.3
6 27	617	1893 Feb. 16	W	10 W	M 6	1900 Dec.	L, P	R1	— 0.0
6 45	157	1892 Feb. 4	W	2 E	G 33	1908 Mar.	N, MH	S	+ 0.1
7 3	139	1892 Jan. 20	W	2 E	G 33	1901 Jan.	L, P	R1	+ 0.1
7 21	1486	1896 Feb. 7	W	2 W	M 23	1908 Nov.	T, MH	S	— 0.5
7 39	140	1892 Jan. 30	W	5 E	G 33	1908 Mar.	A, MH	R1	— 0.0
7 57	3862	1915 Feb. 10	B	6 W	M 23	1915 Feb.	P, P	R2	+ 0.4
8 15	595	1893 Feb. 7	W	3 W	M 6	1908 Aug.	ES, N	R2	— 0.5
8 33	607	1893 Feb. 8	W	1 W	M 6	1908 Aug.	ES, N	R2	— 0.2
8 51	223	1892 Mar. 26	W	3 W	G 33	1908 April	ES, T	R2	— 0.1
9 9	210	1892 Mar. 19	W	6 E	G 33	1908 Mar.	ES, T	R2	+ 0.6
9 27	3243	1910 Feb. 14	J	6 W	M 23	1910 Mar.	GM, O	S	+ 0.7
9 45	674	1893 Mar. 13	W	8 W	M 6	1908 Sep.	ES, N	R2	— 0.8
10 3	218	1892 Mar. 24	W	1 W	G 33	1908 April	ES, T	R2	— 0.4
10 21	214	1892 Mar. 19	W	3 E	G 33	1908 April	ES, T	R2	— 1.1
10 39	3259	1910 Mar. 11	J	3 W	M 23	1910 April	P, P	R1	— 1.1
10 57	3895	1915 April 13	B	7 W	M 23	1915 April	P, P	R2	— 0.7
11 15	1225	1895 April 24	W	3 W	M 23	1904 Dec.	ES, BS	R1	— 1.0
11 33	3912	1915 May 6	B	3 E	M 23	1915 May	P, P	R2	— 0.4
11 51	1251	1895 May 17	W	2 E	M 23	1905 Jan.	BS, G	S	— 1.6
12 9	3289	1910 April 5	J	4 E	M 23	1910 May	GM, O	S	+ 0.9
12 27	1537	1896 June 8	W	19 W	M 23	1903 July	ES, P	R1	— 0.9
12 45	977	1894 May 30	W	5 W	M 11	1906 April	ES, EH	R2	— 1.0
13 3	1533	1896 June 5	W	1 E	M 23	1903 June	ES, P	R1	— 0.8
13 21	735	1893 June 5	W	3 E	M 6	1901 Dec.	L, P	R1	— 1.6
13 39	736	1893 June 5	W	2 E	M 6	1900 Nov.	L, P	R1	— 0.6
13 57	737	1893 June 5	W	4 E	M 6	1901 Jan.	MP, MP	*C	— 0.9
14 15	753	1893 June 8	W	0	M 6	1900 Dec.	L, P	R1	— 0.7
14 33	993	1894 June 2	W	7 W	M 11	1900 Dec.	P, S	*M, S	— 0.1
14 51	964	1894 May 28	W	5 E	M 11	1900 Dec.	H, L	*M, S	— 0.3
15 9	966	1894 May 28	W	9 W	M 11	1906 April	R, T	S	— 0.7
15 27	1010	1894 June 29	W	1 W	M 11	1906 May	ES, EH	R2	— 0.2
15 45	1328	1895 July 12	W	1 W	M 23	1908 Nov.	A, HB	R1	— 0.4
16 3	333	1892 July 7	W	4 E	G 33	1908 May	ES, T	R2	— 0.6
16 21	1013	1894 June 29	W	10 E	M 11	1906 May	ES, EH	R2	— 0.8
16 39	3031	1909 Aug. 7	J	16 W	M 23	1910 Jan.	GM, O	S	+ 0.2
16 57	1016	1894 June 29	W	0	M 11	1906 May	ES, EH	R2	— 0.1
17 15	1031	1894 Aug. 3	W	5 E	M 11	1906 Sep.	T, R	S	— 0.9
17 33	3946	1915 July 13	B	6 E	M 23	1915 July	P, P	R2	— 0.1
17 51	3947	1915 July 13	B	6 E	M 23	1915 Aug.	P, P	R2	— 0.3
18 9	1352	1895 July 17	W	5 E	M 23	1908 Nov.	ES, N	R2	— 0.0
18 27	1570	1896 Aug. 12	W	13 E	M 23	1904 Aug.	ES, P	R1	+ 0.2
18 45	1048	1894 Aug. 31	W	3 W	M 11	1906 Oct.	ES, EH	R2	— 1.1
19 3	366	1892 July 27	W	3 E	G 33	1908 June	N, MH	S	— 0.4
19 21	402	1892 Aug. 18	W	7 E	G 33	1905 Nov.	ES, ES	R2	— 0.8
19 39	392	1892 Aug. 17	W	3 E	G 33	1908 June	N, MH	S	— 0.6
19 57	1400	1895 Sep. 16	W	5 E	M 23	1903 Sep.	ES, P	R1	+ 1.0
20 15	1092	1894 Sep. 29	W	12 W	M 23	1906 Oct.	BS, P	R1	— 0.6
20 33	415	1892 Aug. 19	W	3 E	G 33	1908 July	A, HB	R1	— 0.3
20 51	416	1892 Aug. 19	W	3 E	G 33	1900 Nov.	WH, WH	*C	— 0.1
21 9	422	1892 Sep. 12	W	1 E	G 33	1908 July	ES, T	R2	— 0.0
21 27	1410	1895 Oct. 10	W	13 E	M 23	1903 Oct.	ES, P	R1	+ 1.4
21 45	4058	1916 Aug. 24	C	1 E	M 23	1917 Jan.	P, P	R2	+ 0.1
22 3	425	1892 Sep. 12	W	3 E	G 33	1908 July	N, MH	S	— 0.1
22 21	1119	1894 Oct. 2	W	1 E	M 23	1906 Oct.	ES, ES	R2	— 0.5
22 39	452	1892 Oct. 10	W	2 W	G 33	1908 July	T, MH	S	+ 0.2
22 57	467	1892 Oct. 15	W	1 W	G 33	1908 July	ES, N	R2	— 1.0
23 15	4061	1916 Oct. 21	B	4 W	M 23	1917 Jan.	P, P	R2	— 0.2
23 33	4062	1916 Oct. 21	B	4 W	M 23	1917 Feb.	P, P	R2	— 0.1
23 51	4000	1915 Nov. 5	B	6 E	M 23	1915 Nov.	P, P	R2	— 0.0

* Diameters measured by P on R2.

TABLE IX.—PARTICULARS OF THE PLATES IN VOL. 1—continued.

ZONE — 66°.

R.A.	Plate.	Exposed—		H.A.	Réseau.	Measured—		Mic.	Mag. Corr.
		On.	By.			In.	By.		
h m				m					
0 0	806	1893 Oct. 11	W	0	M 6	1902 June	MP, MP	*C	+ 0.8
0 18	4064	1916 Oct. 21	B	0	M 23	1917 Feb.	P, P	R2	+ 0.1
0 36	4003	1915 Nov. 5	B	5 E	M 23	1915 Nov.	P, P	R2	+ 0.6
0 54	493	1892 Nov. 14	W	9 E	G 27	1908 July	A, HB	R1	+ 0.1
1 12	494	1892 Nov. 14	W	11 E	G 27	1902 June	EL, H	S	- 0.3
1 30	1614	1896 Nov. 6	W	2 W	M 23	1904 Sep.	ES, P	R1	+ 0.9
1 48	1755	1897 Nov. 25	W	12 W	M 23	1908 Dec.	EH, N	R2	+ 0.4
2 6	3144	1909 Nov. 3	J	7 E	M 23	1909 Dec.	HB, M	R1	- 0.3
2 24	499	1892 Nov. 14	W	5 E	G 27	1908 July	T, MH	S	- 0.6
2 42	1158	1894 Nov. 22	W	5 E	M 23	1908 Oct.	A, HB	R1	- 0.5
3 0	1456	1895 Dec. 12	W	5 W	M 23	1906 Mar.	ES, EH	R2	0.0
3 18	547	1892 Dec. 23	W	1 E	G 27	1900 Nov.	L, P	R1	- 0.2
3 36	1465	1895 Dec. 16	W	8 W	M 23	1905 May	EH, G	S	- 0.7
3 54	860	1893 Dec. 30	W	1 E	M 6	1908 Oct.	A, HB	R1	- 0.2
4 12	550	1892 Dec. 23	W	9 E	G 27	1908 Aug.	ES, N	R2	- 0.1
4 30	534	1892 Dec. 19	W	3 E	G 27	1908 Aug.	T, MH	S	- 0.1
4 48	535	1892 Dec. 19	W	7 E	G 27	1900 Dec.	WH, WH	*C	+ 0.1
5 6	869	1894 Jan. 8	W	4 W	M 6	1908 Oct.	T, MH	S	- 0.4
5 24	142	1892 Feb. 2	W	3 W	G 33	1908 Mar.	ES, T	R2	- 0.3
5 42	143	1892 Feb. 2	W	13 W	G 33	1908 Mar.	N, HB	S	- 0.1
6 0	615	1893 Feb. 16	W	8 W	M 6	1900 Dec.	WH, WH	*C	- 0.1
6 18	144	1892 Feb. 2	W	0	G 33	1908 Mar.	ES, T	R2	- 0.4
6 36	151	1892 Feb. 3	W	0	G 33	1900 Dec.	L, P	R1	+ 0.2
6 54	1492	1896 Mar. 5	W	0	M 23	1901 Dec.	MP, MP	*C	+ 0.2
7 12	653	1893 Mar. 11	W	5 E	M 6	1902 July	EL, H	S	- 0.7
7 30	3448	1911 Jan. 31	J	2 W	M 23	1911 Feb.	HB, M	R1	+ 0.1
7 48	4071	1917 Mar. 4	B	4 E	M 23	1917 Mar.	WT, P	R2	- 0.1
8 6	3229	1910 Feb. 9	J	6 E	M 23	1910 Feb.	GM, O	S	+ 0.6
8 24	3231	1910 Feb. 9	J	4 W	M 23	1910 Feb.	HB, M	R1	+ 0.5
8 42	625	1893 Feb. 16	W	1 E	M 6	1902 July	EL, H	S	+ 0.1
9 0	203	1892 Mar. 18	W	9 E	G 33	1908 Mar.	ES, T	R2	- 0.5
9 18	661	1893 Mar. 11	W	0	M 6	1908 Sep.	ES, N	R2	- 0.7
9 36	205	1892 Mar. 18	W	6 E	G 33	1908 Mar.	N, MH	S	- 0.8
9 54	3274	1910 Mar. 18	J	1 E	M 23	1910 May	HB, M	R1	- 0.2
10 12	3256	1910 Mar. 11	J	7 E	M 23	1910 April	GM, O	S	+ 0.3
10 30	227	1892 Mar. 26	W	9 E	G 33	1908 April	A, HB	R1	- 1.4
10 48	3879	1915 Mar. 11	B	2 W	M 23	1915 Mar.	P, P	R2	- 0.1
11 6	4076	1917 April 17	B	1 E	M 23	1917 June	P, P	R2	- 0.3
11 24	1231	1895 April 25	W	0	M 23	1902 Aug.	L, P	R1	- 0.2
11 42	3903	1915 May 4	B	0	M 23	1915 June	P, P	R2	+ 0.1
12 0	1252	1895 May 17	W	4 W	M 23	1902 Aug.	L, P	R1	- 0.8
12 18	3317	1910 May 9	J	4 W	M 23	1910 May	HB, M	R1	- 0.1
12 36	3291	1910 April 5	J	4 W	M 23	1910 April	HB, M	R1	- 0.4
12 54	733	1893 April 20	W	7 E	M 6	1902 June	EL, H	S	- 1.4
13 12	312	1892 June 13	W	7 W	G 33	1902 April	EL, H	S	- 1.7
13 30	742	1893 June 6	W	6 W	M 6	1902 June	L, P	R1	- 1.4
13 48	301	1892 May 27	W	4 W	G 33	1902 April	L, P	R1	- 1.0
14 6	1277	1895 May 22	W	6 E	M 23	1902 Sep.	EL, H	S	- 0.8
14 24	1544	1896 June 11	W	9 E	M 23	1903 Feb.	ES, P	R1	- 0.4
14 42	327	1892 June 14	W	12 E	G 23	1902 April	EL, H	S	- 1.1
15 0	1325	1895 July 12	W	0	M 23	1902 Nov.	EL, H	S	- 0.2
15 18	1316	1895 June 24	W	9 E	M 23	1902 Oct.	EL, EL	S	- 0.5
15 36	1306	1895 June 17	W	9 E	M 23	1902 Oct.	MP, MP	R1	- 1.1
15 54	1552	1896 July 1	W	6 E	M 23	1905 Mar.	ES, ES	R1	- 0.3
16 12	3940	1915 July 1	B	5 W	M 23	1915 Sep.	P, P	R2	0.0
16 30	1330	1895 July 12	W	1 W	M 23	1902 Nov.	P, P	R1	- 0.2
16 48	3930	1915 June 19	B	3 E	M 23	1915 July	P, P	R2	+ 0.2
17 6	1017	1894 June 29	W	5 W	M 11	1906 Jun	R, P	R1	- 0.5
17 24	3035	1909 Aug. 8	J	5 W	M 23	1909 Sep.	BS		
17 42	381	1892 July 29	W	9 E	G 33	1908 Dec.	HB, M	R1	- 0.4
18 0	3948	1915 July 13	B	1 E	M 23	1908 June	A, HB	R1	- 0.7
18 18	4089	1917 Aug. 27	B	2 E	M 23	1915 Oct.	P, P	R2	- 0.4
18 36	3957	1915 Aug. 3	B	1 E	M 23	1917 Sep.	P, P	R2	+ 0.1
18 54	1374	1895 Aug. 15	W	1 E	M 23	1915 Oct.	P, P	R2	+ 0.5
19 12	391	1892 Aug. 17	W	4 W	G 33	1906 Mar.	ES, EH	R2	+ 0.3
19 30	411	1892 Aug. 19	W	14 E	G 33	1908 June	ES, T	R2	- 0.7
19 48	1395	1895 Sep. 13	W	5 W	M 23	1900 Nov.	P, P	R1	- 0.4
20 6	1576	1896 Sep. 2	W	8 E	M 23	1905 April	ES, BS	R1	- 0.1
20 24	3969	1915 Sep. 7	B	12 W	M 23	1904 Aug.	BS, R	S	- 0.9
20 42	3976	1915 Sep. 12	B	5 W	M 23	1915 Dec.	P, P	R2	+ 0.4
21 0	3971	1915 Sep. 7	B	4 W	M 23	1917 Mar.	P, P	R2	+ 0.5
21 18	447	1892 Oct. 10	W	1 W	G 33	1917 Mar.	WT, P	R2	- 0.3
21 36	428	1892 Sep. 13	W	12 E	G 33	1902 June	MP, MP	*C	- 0.2
21 54	429	1892 Sep. 13	W	11 E	G 33	1908 July	A, HB	R1	+ 0.2
22 12	4090	1917 Oct. 10	B	4 E	M 23	1908 July	ES, N	R2	- 0.7
22 30	426	1892 Sep. 12	W	13 E	G 33	1917 Oct.	P, P	R2	+ 0.4
22 48	444	1892 Sep. 28	W	1 E	G 33	1901 Dec.	L, L	R1	- 0.3
23 6	445	1892 Sep. 28	W	1 E	G 33	1900 Nov.	MP, MP	*C	- 0.3
23 24	1091	1894 Sep. 28	W	7 E	M 23	1902 June	EL, H	S	- 1.0
23 42	4094	1917 Oct. 10	B	1 E	M 23	1902 July	EL, H	S	- 0.7
						1917 Nov.	P, P	R2	+ 0.2

* Diameters measured by P on R2

In column 4—B = J. M. Baldwin, C = G. W. Cornell, J = G. F. Johns, W = W. J. Wallace.

For the designations in column 8 see Introduction p. xxiii.

ZONE -65°

9471.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.											
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.										
PLATE CENTRE. 0h 9m, - 65°.					PLATE CENTRE. 0h 27m, - 65°.					PLATE CENTRE. 0h 27m, - 65°.					PLATE CENTRE. 0h 27m, - 65°.														
Plate 460. 1892, Oct. II.					Plate 814. 1893, Oct. 30.					Plate 814. 1893, Oct. 30.					Plate 814. 1893, Oct. 30.														
PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.														
a = - .01185 d = - .00058 b = + .00035 e = - .01159 c = - .1017 f = - .1284					a = - .01152 d = - .00036 b = + .00046 e = - .01134 c = - .0827 f = - .0900					a = - .01152 d = - .00036 b = + .00046 e = - .01134 c = - .0827 f = - .0900					a = - .01152 d = - .00036 b = + .00046 e = - .01134 c = - .0827 f = - .0900														
To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$														
14	-61.746	+14.918	64	4399	9.5	11	-59.926	+1.850	65	4198	10.1	9	-55.787	+12.894	64	4401	10.1	11	-55.032	+22.693	64	4401	10.1	9	-54.277	+8.608	64	4401	10.1
12	-53.283	+9.524	64	4402	9.8	15	-51.175	+31.686	64	4403	9.5	20	-50.141	+11.012	64	4404	8.2	14	-50.066	+11.554	64	4404	8.2	11	-48.651	+43.672	64	4404	8.2
9	-48.439	+55.521	64	2	10.6	9	-44.552	+48.430	64	2	10.6	9	-39.724	+50.229	64	3	8.6	11	-31.067	+10.324	64	3	8.6	19	-28.336	+51.768	64	3	8.6
12	-23.529	+9.616	64	4	9.8	18	-22.023	+49.108	64	5	8.7	11	-19.559	+60.674	64	6	10.0	9	-12.448	+10.124	64	7	9.2	15	-9.051	+10.657	64	7	9.2
9	-8.567	+39.554	64	8	9.6	9	-8.500	+35.474	64	8	9.6	13	+5.430	+16.331	64	8	9.6	10	+10.955	+48.527	64	8	9.6	12	+12.112	+29.551	64	9	10.0
14	+12.754	+42.670	64	10	10.0	15	+13.906	+54.261	64	11	9.6	16	+16.423	+24.609	64	12	9.1	15	+18.364	+35.591	64	13	9.6	11	+21.753	+5.107	65	8	9.8
9	+21.865	+55.552	64	14	10.4	10	+22.614	+18.318	64	14	10.4	10	+22.986	+1.557	64	15	10.0	12	+27.813	+23.508	64	15	10.0	15	+30.010	+47.102	64	16	9.1
26	+30.676	+58.677	64	17	7.8	11	+33.253	+42.884	64	19	10.4	12	+40.698	+48.202	64	20	9.8	10	+41.453	+12.107	64	20	9.8	26	+30.676	+58.677	64	17	7.8
9	+50.712	+58.344	65	17	9.1	15	+51.653	+3.800	65	17	9.1	9	+52.257	+14.503	64	22	9.5	15	+53.001	+14.498	64	22	9.5	9	+53.355	+54.243	64	23	8.9
18	+58.186	+45.794	64	23	8.9	14	+58.223	+23.201	64	24	9.6	10	-64.217	-17.262	65	4196	10.6	12	-60.516	-26.411	65	4197	9.8	14	-54.769	-55.940	66	3824	9.1

0h 45m, - 65°

2

C.P.D.					C.P.D.					C.P.D.					C.P.D.						
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.		
PLATE CENTRE. 1 ^h 3 ^m , - 65°.					PLATE CENTRE. 1 ^h 21 ^m , - 65°.					PLATE CENTRE. 1 ^h 21 ^m , - 65°.					PLATE CENTRE. 1 ^h 21 ^m , - 65°.						
Plate 488. 1892, Nov. 12.					Plate 4009. 1915, Nov. 26.					Plate 4009. 1915, Nov. 26.					Plate 4009. 1915, Nov. 26.						
PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.						
$a = -0.01160$ $d = -0.00237$ $b = +0.00231$ $e = -0.01126$ $c = -0.0883$ $f = +0.0854$					$a = -0.01154$ $d = +0.00064$ $o = -0.00060$ $e = -0.01125$ $c = +0.0298$ $f = -0.0937$					$a = -0.01154$ $d = +0.00064$ $o = -0.00060$ $e = -0.01125$ $c = +0.0298$ $f = -0.0937$					$a = -0.01154$ $d = +0.00064$ $o = -0.00060$ $e = -0.01125$ $c = +0.0298$ $f = -0.0937$						
To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						
26	-61.509	+33.053	64	95	8.6	24	-14.404	-14.618	65	112	8.0	11	-60.954	+26.557		18	+7.148	+6.823	65	131	9.8
34	-60.586	+40.236	64	96	8.4	15	-1.044	-18.697	65	114	9.2	13	-60.889	+29.111		11	+7.636	+28.727			
10	-49.101	+28.853	64	98	10.5	11	+6.350	-45.599				10	-59.255	+8.070		9	+8.753	+43.729			
11	-47.906	+43.737	64	99	10.5	10	+11.964	-19.300	65	116	9.7	12	-57.817	+47.054		16	+14.034	+61.918	64	130	9.8
14	-44.570	+25.579	64	100	9.6	14	+16.264	-46.239	65	118	9.6	27	-57.462	+22.935	64	122	+14.186	+20.607			
11	-42.538	+23.023	64	101	10.6	11	+16.551	-8.900				18	-53.048	+8.139	64	123	+17.143	+12.901			
21	-40.280	+9.298	64	102	8.7	11	+18.051	-36.910				32	-52.129	+57.677	64	124	+17.834	+43.045			
11	-36.089	+39.294	64	104	10.2	14	+24.102	-2.867	65	120	9.5	11	-52.070	+3.232		12	+18.092	+5.641			
18	-35.765	+14.142	64	103	9.2	10	+35.172	-8.335				9	-50.759	+28.913		10	+20.726	+29.907			
12	-33.107	+62.523	64	105	9.6	12	+35.218	-4.541	65	121	9.7	16	-50.706	+44.374	64	125	+24.393	+64.041			
12	-31.988	+23.702	64	106	10.2	10	+35.708	-26.995				14	-49.240	+7.966		12	+25.330	+12.702			
11	-31.635	+5.786	65	105	10.2	13	+40.451	-9.624	65	122	9.7	9	-48.840	+4.872		9	+27.615	+42.938			
11	-29.271	+4.928	65	107	10.5	20	+44.357	-34.833	65	123	8.5	10	-48.520	+63.536		15	+30.213	+37.867			
10	-27.630	+50.804	64	108	10.6	13	+47.516	-56.388	66	90	9.5	16	-47.244	+58.174	64	126	+30.787	+47.784			
16	-27.429	+28.624	64	107	8.9	14	+49.653	-26.567	65	124	9.2	11	-46.518	+12.073		9	+32.841	+45.828			
9	-25.033	+21.016				16	+50.809	-18.027	65	125	8.8	11	-46.351	+35.829		10	+34.225	+0.349			
14	-23.041	+5.744	65	108	9.5	11	+55.347	-62.182	66	91	9.6	10	-45.950	+17.257		13	+34.241	+42.518			
20	-18.662	+19.105	64	109	9.0							9	-42.500	+6.357		20	+34.544	+34.749	64	131	9.7
9	-15.835	+20.823										10	-38.854	+49.816		11	+35.386	+48.895			
9	-14.138	+53.160										11	-37.341	+8.469		17	+35.398	+38.856			
14	-13.362	+42.352	64	110	9.5							9	-37.181	+59.159		14	+37.952	+56.426			
9	-11.537	+24.512										11	-36.958	+13.916		11	+38.282	+17.621			
12	-10.347	+29.501	64	111	9.7							10	-36.582	+40.092		9	+38.469	+10.715			
10	-7.345	+29.414										10	-36.183	+9.725		9	+38.812	+43.845			
9	-6.757	+47.491										9	-34.657	+20.572		11	+39.979	+29.273			
11	-6.691	+23.099										11	-34.155	+4.488		9	+42.518	+47.976			
12	-4.139	+39.592	64	112	9.7							11	-31.536	+33.978		10	+42.697	+61.047			
13	+4.065	+33.343	64	114	9.5							11	-30.813	+36.459		9	+43.016	+44.164			
18	+9.286	+9.372	64	115	9.1							10	-29.572	+45.880		11	+44.317	+34.029			
11	+11.228	+1.307	65	115	9.8							12	-29.470	+3.607		11	+46.124	+33.332			
12	+12.746	+8.019	65	117	9.6							81				9	+46.353	+2.501			
13	+14.345	+50.357	64	116	9.7							11	-28.932	+21.622		12	+48.368	+12.449			
20	+20.575	+6.378	65	119	9.0							12	-28.606	+63.476		10	+49.162	+8.193			
13	+23.287	+21.827	64	117	9.6							14	-28.287	+36.297		11	+50.717	+41.820			
15	+35.423	+22.767	64	118	9.4							9	-28.124	+48.142		11	+50.799	+31.524			
10	+36.267	+57.503										10	-28.071	+40.871		18	+52.063	+29.661	64	132	9.7
11	+40.345	+57.410										12	-27.782	+48.810		15	+53.980	+20.639			
12	+42.360	+16.262	64	120	9.7							9	-27.228	+2.680		11	+54.685	+59.680			
15	+42.847	+42.494	64	119	9.1							13	-20.362	+45.500		9	+57.007	+5.983			
16	+48.621	+22.385	64	121	9.0							15	-19.101	+56.115		30	+57.447	+36.604	64	133	8.7
41												41				101					
10	+49.192	+36.909										11	-17.609	+24.606		11	+57.760	+5.292			
17	+59.589	+22.784	64	122	9.0							11	-17.113	+30.227		15	+59.747	+37.144			
12	+63.026	+7.697	64	123	9.7							12	-15.903	+10.661		12	+62.171	+40.389			
11	-61.400	-28.106	65	98	9.8							9	-15.068	+3.776		10	+64.375	+26.879			
11	-57.696	-50.902	65	99	10.0							20	-13.822	+44.350	64	127	+50.799	+31.524			
16	-55.827	-16.523	65	100	8.9							9	-13.535	+59.875		20	-64.042	-26.965	65	124	9.2
22	-55.456	-19.534	65	101	8.3							11	-6.631	+51.889		24	-63.414	-18.484	65	125	8.8
10	-48.357	-14.661										12	-5.556	+9.621		9	-58.575	-17.614			
9	-43.344	-31.456										11	-4.725	+13.632		14	-55.910	-62.119	66	91	9.6
21	-40.033	-13.064	65	102	8.8							12	-2.533	+33.838		9	-54.857	-7.620			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.
9	111, -51°208	-13°844	65	126	9.7	12	171, +31°734	-28°858	65	133	9.8	PLATE CENTRE. 1h 39m, - 65°. Plate 1754. 1897, Nov. 25. PROVISIONAL CONSTANTS. a = - .01133 d = - .00053 b = + .00054 e = - .01096 c = - .0270 f = - .0525 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f		14	51, -17°851	+59°907
16	-48°100	-22°408				16	+33°201	-10°910				10	-16°708	+61°656		
12	-47°385	-48°325				14	+34°466	-53°703				10	-16°449	+ 0°363		
11	-46°971	-10°981				13	+35°269	-32°308				14	-16°175	+43°683		
11	-44°848	-27°588				18	+36°751	-24°907				9	-15°684	+16°100		
12	-44°002	-48°381	65	127	8.2	9	+37°236	-20°225	65	134	7.8	14	-15°364	+49°962		
40	-43°461	-45°311				13	+37°632	-45°834				10	-13°527	+23°250		
22	-39°482	- 9°863				12	+37°992	-35°457				9	-13°244	+52°067		
12	-39°148	- 7°695				42	+39°406	-38°849				13	-11°842	+64°837		
12	-38°970	-27°834				11	+39°571	-11°563				13	- 9°508	+32°885		
	121		65	129	9.5	11	181 +40°954	-42°872	64	133	8.7	9	61 - 9°429	+19°095		
13	-38°742	-50°620				10	+41°322	-34°525				10	- 9°221	+48°584		
10	-34°875	-43°405				9	+42°145	-19°890				9	- 8°719	+20°563		
14	-34°054	-27°732				43	+43°287	-39°113				11	- 8°679	+ 2°668		
21	-32°006	-31°000				11	+43°567	-10°249				9	- 8°157	+52°577		
13	-31°802	-20°295	65	136	9.4	22	+46°561	- 8°175	65	135	7.7	10	- 3°990	+52°879		
10	-31°145	-23°599				10	+46°742	-41°760				9	- 2°796	+51°715		
9	-28°715	-18°377				11	+48°472	-19°630				16	- 0°403	+54°761		
9	-28°151	- 9°096				12	+49°616	-39°805				9	+ 1°860	+52°445		
9	-27°829	-37°481				14	+50°340	-12°415				9	+ 2°644	+22°115		
12	-26°686	-34°775	65	137	8.3	11	191 +50°809	-31°618	64	134	9.6	9	71 + 3°450	+32°527		
	131					9	+53°383	-61°154				10	-54°446	+20°223		
9	-25°733	-41°761				9	+53°766	-52°980				10	-54°378	+46°860		
9	-25°357	- 8°245				9	+55°510	-49°743				9	-53°414	+61°063		
10	-23°213	-16°827				26	+56°830	-24°040				15	-53°090	+53°957		
9	-22°645	-56°117	66	96	9.7	10	+56°936	-46°429	64	134	9.6	14	-53°045	+27°253		
12	-21°128	-43°678				12	+57°758	-26°312				11	-52°973	+27°198		
	141					15	+58°099	-23°352				10	-51°858	+24°157		
9	-18°832	-49°240				10	+59°121	-27°752				9	-51°290	+45°524		
10	-17°976	-24°215				10	+63°940	-52°751				10	-48°474	+55°245		
9	-16°804	-47°694	66	96	9.7	10	201 +64°496	- 3°086	64	134	9.6	9	21 -47°450	+44°942		
11	-15°575	- 4°697				16						17	-46°175	+36°307		
9	-15°453	-40°493										9	-45°930	+26°541		
17	-13°817	-50°120										27	-44°313	+58°092		
9	-13°547	-39°777										9	-40°756	+40°566		
10	-12°353	- 1°190	65	132	9.6	9	-39°441	+ 1°182	64	134	9.6	9	-39°441	+ 1°182		
19	- 9°636	-61°193				12	+57°758	-26°312				11	-38°911	+56°992		
13	- 7°036	- 5°332				15	+58°099	-23°352				28	-33°878	+55°774		
	151					10	+59°121	-27°752				10	-32°595	+60°465		
14	- 5°167	-58°823				10	+63°940	-52°751				12	-31°914	+57°846		
12	- 3°956	-42°371	65	132	9.6	12	31 -30°589	+29°850	64	134	9.6	9	-30°589	+29°850		
14	- 2°684	-25°248				16						11	-30°462	+17°855		
13	- 1°632	-45°296										9	-30°217	+58°645		
10	- 1°132	- 7°227										13	-30°156	+28°212		
	161											11	-28°323	+33°790		
14	- 0°552	-42°742	65	132	9.6	12	41 -25°396	+61°388	64	134	9.6	9	-27°924	+ 0°324		
19	+ 0°359	- 8°539				13	-25°396	+61°388				19	-26°668	+ 9°158		
11	+ 1°276	-35°121				17	-24°931	+53°497				9	-26°320	+58°717		
12	+ 3°584	-62°224				9	-26°168	+47°562				9	-26°168	+47°562		
11	+ 6°536	-37°331				10	-25°529	+25°756				10	-25°529	+25°756		
13	+10°196	-12°418	65	132	9.6	13	41 -25°396	+61°388	64	134	9.6	10	+30°109	+48°924		
14	+10°920	-46°934				17	-24°931	+53°497				10	-25°529	+25°756		
12	+13°120	-47°645				9	-26°168	+47°562				13	-25°396	+61°388		
9	+14°505	-57°557				10	-25°529	+25°756				11	-25°390	+21°352		
10	+16°235	-35°793				11	-25°390	+21°352				17	-24°931	+53°497		
	161		65	132	9.6	13	41 -25°396	+61°388	64	134	9.6	9	+31°532	+ 4°452		
24	+16°797	- 5°974				17	-24°931	+53°497				10	-25°529	+25°756		
13	+17°138	-45°353				9	-26°168	+47°562				13	-25°396	+61°388		
11	+18°356	-21°214				10	-25°529	+25°756				11	-25°390	+21°352		
12	+19°614	-23°649				11	-25°390	+21°352				17	-24°931	+53°497		
13	+22°722	-62°541	66	102	9.8	9	-23°579	+63°048	64	137	9.1	39	+36°176	+53°876		
	181					12	-22°194	+37°833				11	+36°352	+60°506		
13	+23°475	-56°908				9	-21°679	+57°479				9	-23°579	+63°048		
9	+24°767	-64°484				11	-20°423	+44°298				12	-22°194	+37°833		
15	+26°050	-38°197				9	-19°441	+32°990				9	-21°679	+57°479		
16	+27°413	-60°802	66	102	9.8	9	-18°857	+34°269	64	137	9.1	19	+38°973	+10°143		
10	+31°521	-35°685				9	-18°857	+34°269				9	-19°441	+32°990		
	191					9	-18°857	+34°269				9	-18°857	+34°269		
13	+23°475	-56°908				9	-18°857	+34°269				9	-18°857	+34°269		
9	+24°767	-64°484				9	-18°857	+34°269				9	-18°857	+34°269		
15	+26°050	-38°197	66	102	9.8	9	-18°857	+34°269	64	137	9.1	19	+38°973	+10°143		
16	+27°413	-60°802				9	-18°857	+34°269				9	-18°857	+34°269		
10	+31°521	-35°685				9	-18°857	+34°269				9	-18°857	+34°269		
	191					9	-18°857	+34°269				9	-18°857	+34°269		
13	+23°475	-56°908				9	-18°857	+34°269				9	-18°857	+34°269		
9	+24°767	-64°484	66	102	9.8	9	-18°857	+34°269	64	137	9.1	19	+38°973	+10°143		
15	+26°050	-38°197				9	-18°857	+34°269				9	-18°857	+34°269		
16	+27°413	-60°802				9	-18°857	+34°269				9	-18°857	+34°269		
10	+31°521	-35°685				9	-18°857	+34°269				9	-18°857	+34°269		
	191					9	-18°857	+34°269				9	-18°857	+34°269		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,				PLATE CENTRE.				
	41.653	+ 8.633	64	138	8.5	10	-37.389	-52.226		9	+41.582	-38.769			1h 57m, - 65°.				
49	+42.496	+49.424				9	-37.084	-45.818		9	+41.897	-46.522			Plate 841. 1893, Dec. 8.				
9	+42.848	+45.647				11	-36.334	-31.979		14	+42.340	-36.903			PROVISIONAL CONSTANTS.				
9	+42.897	+30.745				37	-35.522	-31.417	65	141	8.7	18	+43.798	-9.826	65	150	9.2	$a = - .01132$ $d = - .00010$	
10	+43.354	+16.127				11	-35.411	-40.018		9	+44.986	-38.265			$b = + .00023$ $e = - .11138$		$c = + .0785$ $f = - .0589$.		
9	+45.761	+18.935				14	-33.637	-13.160		14	+45.477	-25.527			To obtain standard co-ordinates ξ, η				
18	+47.125	+16.493				14	-33.490	-39.486		9	+45.543	-55.125			$\xi = x + ax + by + c$				
51	47.470	+59.274	64	139	8.2	9	-32.841	-38.131		18	+48.075	-3.469	65	151	9.2	$\eta = y + dx + ey + f$			
12	+47.535	+37.970				16	-30.833	-64.545		14	+50.060	-50.986							
14	+47.769	+40.874				14	-28.721	-59.768		12	+50.120	-8.068							
	121						181				241								
22	+48.365	+10.638				14	-25.393	-55.617		9	+50.241	-54.531			13	-63.880	+18.706		
10	+48.402	+2.965				9	-24.830	-52.482		10	+50.903	-24.910			11	-62.052	+53.087		
50	+50.347	+6.502	65	152	8.2	9	-22.915	-20.662		9	+51.396	-58.637			10	-59.593	+55.876		
15	+50.550	+57.272				40	-22.839	-15.147	65	142	9.2	9	+52.538	-62.577	12	-58.513	+57.437		
9	+52.382	+17.936				13	-21.850	-34.154		11	+52.598	-47.410			12	-58.376	+12.543		
23	+53.022	+19.138				11	-20.364	-61.482		9	+52.840	-28.841			9	-54.892	+51.306		
9	+53.841	+34.170				14	-16.750	-44.856		12	+53.639	-20.771			12	-48.431	+23.155		
10	+54.321	+43.069				9	-15.890	-10.946		10	+54.239	-60.116			10	-47.015	+49.085		
11	+54.773	+61.711				9	-15.577	-34.416		15	+56.986	-45.285			15	-45.739	+43.437	64	
9	+56.318	+33.971				56	-15.068	-4.730	65	143	8.4	11	+58.636	-29.868	9	-45.423	+43.114	141	
	131						191				251					11			
17	+57.286	+53.302				11	-13.021	-42.838		15	+58.716	-0.400			12	-43.951	+56.270		
19	+58.093	+12.603				11	-11.411	-8.927		18	+59.028	-45.689	65	153	9.3	14	-42.254	+20.121	
9	+59.240	+41.205				18	-8.337	-56.118	66	107	9.2	15	+62.264	-37.056	65	154	9.2	9	
14	+59.942	+55.902				9	-8.064	-22.725							11	-38.171	+4.166		
17	+61.121	+57.380				10	-7.390	-48.441							11	-33.515	+47.648		
12	+64.304	+51.011				9	-6.551	-38.125							13	-32.495	+9.770		
14	-64.169	-12.948				38	-5.989	-32.477	65	144	9.8	9	-30.049	+54.280	9	-30.049	+54.280		
14	-62.898	-40.310				15	-4.467	-10.024							11	-28.604	+61.752		
14	-62.319	-32.073				9	-3.262	-21.565							10	-25.847	+17.463		
9	-59.854	-32.403				9	-0.331	-12.288							13	-25.485	+25.680		
	141						201									21			
9	-59.702	-0.426				14	+0.452	-60.987							12	-24.297	+11.218		
9	-57.844	-53.134				10	+2.576	-56.269							10	-22.594	+41.712		
14	-57.646	-61.309				44	+5.469	-24.967	65	145	8.9	19	-20.872	+28.203	64	142	9.2		
9	-56.968	-9.058				9	+12.112	-29.231							9	-18.538	+28.004		
36	-56.864	-24.068	65	137	8.3	9	+12.459	-51.290							13	-17.790	+15.227		
12	-56.312	-49.789				14	+12.929	-25.650							10	-16.497	+62.481		
9	-56.077	-39.878				14	+14.101	-42.110							12	-15.590	+47.339		
14	-55.771	-26.260				9	+15.120	-25.828							10	-13.370	+57.757		
17	-55.674	-23.292				14	+16.641	-53.560							9	-12.263	+62.698		
14	-55.144	-46.403				12	+20.292	-62.266							9	-5.971	+22.392		
	151						211									31			
9	-54.553	-26.258				14	+22.896	-50.952							11	-5.899	+40.451		
12	-54.297	-27.602				11	+23.323	-43.154							18	-4.302	+38.216	64	
9	-52.815	-25.370				46	+25.854	-53.795	66	111	8.7	10	-2.564	+17.661	10	-2.564	+17.661	143	
9	-51.651	-27.823				15	+26.088	-14.302	65	146	9.3	11	-1.714	+38.780	11	-1.714	+38.780		
9	-50.771	-9.822				18	+27.051	-16.538	65	147	9.2	17	+0.474	+33.050	64	144	9.2		
18	-50.704	-2.616	65	138	9.6	33	+28.284	-22.571	65	148	9.1	10	+2.728	+2.237	10	+2.728	+2.237		
12	-47.805	-5.535				15	+28.830	-18.428							10	+4.078	+21.521		
15	-47.725	-52.163				15	+30.300	-39.358							18	+4.628	+24.452	64	
56	-45.715	-49.790	65	139	8.4	19	+30.466	-17.478	65	149	9.1	18	+4.816	+5.642	65	159	9.2	145	
14	-44.745	-52.922				11	+30.488	-19.168							10	+4.826	+1.473	9.2	
	161						221									41			
12	-44.550	-59.088				10	+31.658	-64.384							9	+6.283	+47.337		
9	-44.322	-17.721				9	+31.870	-41.524							12	+8.279	+41.250		
11	-43.400	-30.979				9	+33.089	-28.668							14	+8.782	+15.773		
13	-43.200	-31.633				9	+35.132	-5.235							9	+10.214	+45.497		
12	-42.754	-34.232				10	+36.956	-29.590							11	+11.289	+58.197		
18	-42.647	-45.885				14	+37.792	-39.898							11	+11.313	+55.940		
32	-41.357	-53.742	66	104	9.2	14	+38.632	-64.172							36	+13.081	+54.297	64	
9	-40.461	-38.904				14	+38.826	-35.341							12	+14.171	+54.109	148	
14	-40.425	-1.995				11	+40.241	-4.862							13	+14.799	+37.291	7.4	
36	-40.382	-49.201	65	140	8.8	9	+41.510	-29.351							9	+15.725	+8.476		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,								
12	+15'806	+ 9'713			16	- 7'862	-10'415	65	157	9'2				
9	+16'888	+32'354			10	- 7'089	-28'499							
10	+17'815	+33'537			11	- 4'629	-42'093							
10	+18'131	+40'046	64	149	9'2	12	- 4'341	-36'446						
10	+21'549	+36'424	64	150	9'1	9	- 1'787	-48'022						
22	+21'642	+17'224	64	151	8'7	12	- 1'153	-46'871						
11	+22'803	+56'933			33	- 0'829	-56'675	66	124	7'4				
10	+23'529	+34'330			20	- 0'173	-16'457	65	158	8'9				
12	+26'444	+26'479			9	+ 3'382	-22'930							
18	+28'062	+34'020			9	+ 6'754	-47'848							
	61					121								
14	+28'406	+40'748			24	+ 8'293	-35'848	65	160	8'5				
10	+31'726	+20'284			20	+10'319	-40'861	65	161	8'8				
9	+32'472	+42'216			21	+11'783	-24'742	66	162	8'8				
12	+34'672	+29'428			9	+13'034	-59'475							
16	+34'801	+14'359			15	+13'045	-27'423							
16	+39'463	+ 8'745			20	+13'532	-53'300	65	163	8'8				
19	+42'692	+ 8'534	64	153	9'2	19	+15'055	-28'942	65	164	9'2			
12	+44'032	+49'061			11	+16'519	-49'759							
19	+44'063	+11'803	64	154	9'1	16	+21'258	-38'892						
10	+45'639	+48'021			19	+23'277	-60'419	66	128	8'8				
	71					131								
10	+48'430	+ 4'772			11	+23'466	- 0'305							
11	+49'648	+21'466			10	+27'713	-62'007							
11	+49'678	+19'437			9	+28'504	-25'755							
20	+51'774	+ 8'532	64	155	9'2	10	+29'980	-17'928						
12	+52'715	+49'750			38	+30'799	-37'725	65	165	7'4				
11	+54'179	+13'804			9	+31'277	-18'737							
11	+57'793	+14'943			19	+33'896	-36'771	65	166	9'1				
12	+59'174	+43'695			15	+35'181	-30'779							
13	+59'668	+ 1'452			9	+41'389	-63'889							
9	+60'752	+51'786			13	+41'865	-26'771							
	81					141								
10	+62'059	+52'930			13	+48'372	- 7'574							
9	+62'092	+17'889			10	+48'757	-53'131							
10	+62'226	+12'026			10	+51'108	-4'480							
10	-64'853	- 8'649			10	+52'740	-38'357							
10	-61'869	-51'462			20	+53'718	-29'243	65	167	9'0				
9	-60'456	-21'068			13	+55'207	-48'347							
13	-56'836	- 0'381			11	+55'611	-34'477							
11	-55'372	-45'291			9	+57'549	-37'896							
13	-53'304	-45'548	65	153	9'3	11	+60'205	-33'835						
19	-50'688	-36'698	65	154	9'2	9	+62'019	-40'681						
	91					151								
9	-48'297	-16'384			10	+62'941	-12'226							
9	-46'790	-39'398												
18	-43'339	-23'413	65	155	9'0									
12	-42'583	-30'876												
18	-39'005	- 4'974	65	156	9'2									
15	-38'416	- 2'614												
16	-36'969	- 4'710												
10	-36'067	-17'876												
11	-32'214	-14'849												
10	-30'952	-62'763												
	101													
10	-30'057	-37'012												
11	-27'490	-58'020												
12	-26'308	-40'441												
9	-26'284	-55'535												
9	-23'109	-17'447												
12	-13'978	-35'148												
10	-13'254	-30'517												
39	-11'380	-55'279	66	123	7'4									
12	- 9'248	-43'063												
10	- 7'999	-15'532												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.
111,					PLATE CENTRE.				51,					
+33'310	-10'530				2 ^h 33 ^m , - 65°.				-63'351	-14'517	65	177	9'5	
+38'719	-50'283				Plate 508. 1892, Nov. 15.				-48'143	-14'553	65	178	9'0	
+41'241	-48'280	65 174	8'7		PROVISIONAL CONSTANTS.				-45'751	-1'299	65	180	9'4	
+44'434	-22'118	65 175	8'9		a = - '01157	d = - '00242			-45'280	-47'584	65	179	9'0	
+44'893	-32'538				b = + '00241	e = - '01124			-43'176	-61'993	66	140	8'2	
					c = + '0429	f = + '0551								
					To obtain standard co-ordinates, ξ, η									
					$\xi = x + ax + by + c$									
					$\eta = y + dx + ey + f$									
+45'187	-25'998				I3	-64'907	+17'658	64 168	9'1					
+45'282	-37'017				21	-62'780	+53'474							
+48'322	-1'089				II	-59'603	+11'902							
+51'045	-20'420				I6	-50'859	+55'420	64 172	9'1					
+51'088	-13'740	65 177	9'5		I3	-50'475	+53'326	64 173	9'5					
121														
+54'738	-47'088				II	-49'132	+4'449							
+61'616	-56'546				54	-47'100	+14'552	64 174	6'4					
					II	-45'975	+7'073							
					I3	-43'472	+4'265	65 181	9'4					
					I3	-40'128	+5'278	65 182	9'3					
					11									
					I0	-39'361	+28'337							
					I2	-39'067	+27'733							
					I0	-38'476	+28'619							
					I6	-32'815	+63'186	64 177	9'1					
					I3	-32'798	+42'599	64 175	9'4					
					I7	-32'531	+39'276	64 176	8'7					
					9	-30'282	+35'564							
					I2	-29'466	+40'375							
					42	-29'110	+30'677	64 178	7'5					
					20	-25'253	+59'350	64 179	8'9					
					21									
					I7	-23'375	+34'816	64 181	8'9					
					II	-23'320	+44'372							
					I5	-18'615	+55'097	64 182	9'4					
					I7	-18'411	+62'827	64 183	9'0					
					I3	-17'045	+8'060	64 184	9'5					
					I3	-16'852	+46'216	64 185	9'0					
					9	-12'077	+33'278							
					II	-10'917	+14'761							
					I7	-10'756	+58'655	64 186	9'1					
					I8	-7'584	+4'235	65 186	8'7					
					31									
					I3	-6'686	+39'348	64 187	9'1					
					I2	-4'921	+14'065							
					I2	+0'556	+49'925							
					I6	+7'966	+61'007	64 189	9'1					
					I4	+10'103	+37'428	64 190	9'1					
					I3	+12'746	+11'327							
					II	+18'513	+11'356							
					9	+19'331	+4'732							
					II	+25'395	+16'117							
					I3	+26'219	+46'317	64 191	9'4					
					41									
					49	+28'295	+17'271	64 192	6'4					
					I2	+30'463	+27'607							
					9	+31'401	+52'196							
					I2	+32'664	+56'454							
					I3	+33'665	+20'693	64 193	9'3					
					II	+34'928	+41'456							
					I3	+37'237	+64'175							
					I2	+40'328	+44'449	64 194	9'3					
					II	+55'229	+40'884							
					I2	+59'633	+3'348							

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
					PLATE CENTRE.									
					2 ^h 51 ^m , - 65°.									
					Plate 525. 1892, Nov. 21.									
					PROVISIONAL CONSTANTS.									
					a = - '01148	d = - '00204								
					b = + '00231	e = - '01139								
					c = + '0854	f = + '0974								
					To obtain standard co-ordinates, ξ, η									
					$\xi = x + ax + by + c$									
					$\eta = y + dx + ey + f$									
					I4	-63'487	+64'687	64 195	8'6					
					9	-63'209	+40'307							
					10	-59'402	+63'021							
					9	-57'731	+49'233							
					12	-56'154	+3'154							
					9	-51'667	+30'424							
					60	-51'074	+52'202	64 196	6'8					
					II	-47'987	+4'636							
					I4	-46'626	+14'932							
					22	-45'784	+10'372	64 197	8'6					
					11									
					I4	-44'349	+23'581							
					I8	-40'717	+15'870	64 198	9'4					
					II	-38'565	+2'574							
					I6	-35'505	+47'338	64 199	9'4					
					24	-34'726	+12'750	64 200	8'6					
					II	-33'235	+56'768							
					II	-32'512	+36'679							
					I5	-28'229	+27'976							
					10	-25'232	+37'646							
					10	-24'442	+18'243							
					21									
					I0	-23'476	+16'492							
					II	-23'414	+16'569							
					I4	-21'105	+1'623							
					22	-19'229	+34'287	64 201	8'5					
					I4	-18'874	+48'858							
					I2	-16'429	+50'376							
					I3	-16'267	+9'084							
					I2	-13'909	+40'869							
					I2	-12'343	+1'117							
					I7	-12'097	+32'120	64 202	9'0					
					31									
					I0	-10'603	+13'379							
					40	-9'972	+63'624	64 203	7'6					
					I4	-7'133	+38'633							
					I4	-6'374	+51'166							
					20	-6'164	+34'497	64 204	8'3					
					9	-5'469	+22'662							
					I4	-1'146	+29'673							
					II	-0'277	+59'653							
					10	+0'623	+50'832							
					15	+2'597	+51'418							
					41									
					I8	+4'005	+15'291	} 64	205	9'0				
					I4	+4'147	+15'118							
					10	+6'305	+37'478							
					10	+9'074	+62'016							
					35	+9'240	+9'586	64	206	7'7				
					32	+11'668	+35'730	64	207	7'8				
					II	+12'469	+29'108							
					30	+12'734	+33'445	64	208	8'0				
					I4	+14'								

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,				PLATE CENTRE. 3h 9m, - 65°. Plate 529. 1892, Dec. 19. PROVISIONAL CONSTANTS. a = - .01167 d = - .00107 b = + .00094 e = - .01120 c = - .0489 f = - .0098 To obtain standard co ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51,					111,				
9	+10.985	+30.623			9	-57.705	+41.166			15	+46.970	+49.656	64 237	8.9	9	+55.741	-46.546		
13	+18.311	+60.544	64 209	9.5	24	-55.111	+43.935	64 220	7.6	14	+47.922	+28.525	64 238	9.5	9	+56.660	-28.310		
20	+21.400	+46.041	64 210	8.2	11	-51.903	+8.439			10	+51.676	+0.106			11	+58.925	-24.648		
10	+22.395	+36.844			13	-48.767	+19.424			11	+61.330	+4.304			9	+62.346	-38.507		
13	+24.258	+61.045	64 211	9.5	15	-43.909	+15.704	64 221	8.9	20	-61.876	-31.367	65 208	8.9	11	+62.589	-23.381		
11	+25.634	+61.427			16	-43.909	+23.609	64 222	9.1	16	-50.745	-38.982	65 209	9.5					
20	+25.749	+35.313	64 212	8.7	13	-42.305	+62.365	64 223	9.6	23	-44.428	-13.501	65 210	8.2	17	+63.261	-38.214	65 233	9.3
18	+27.351	+44.853	64 213	8.6	13	-40.931	+17.012			12	-43.374	-53.970			11	+63.504	-31.816		
20	+30.647	+19.553	64 214	8.9	20	-40.512	+4.408	65 212	8.8	21	-43.133	-56.856	66 169	8.7					
13	+33.868	+37.720			20	-38.936	+0.662	65 213	9.0	20	-40.229	-34.022	65 211	8.7					
	61					11					61								
14	+38.361	+5.950			12	-37.711	+36.031			15	-36.899	-26.480	65 214	9.6					
80	+38.455	+31.782	64 215	5.3	10	-35.400	+3.203			30	-36.193	-35.193	65 215	7.9					
11	+38.478	+14.221			11	-34.749	+19.228			11	-35.240	-19.914							
11	+39.939	+17.389			10	-33.378	+39.176			18	-27.415	-27.996	65 216	9.1					
15	+43.498	+21.009			10	-31.451	+15.346			15	-27.011	-45.376	65 217	9.6					
18	+44.717	+58.621	64 216	8.2	10	-30.647	+11.832			14	-24.921	-11.113							
16	+45.214	+34.658	64 217	9.5	13	-28.392	+52.540	64 224	9.6	13	-24.874	-7.168							
9	+45.283	+64.204			19	-25.677	+54.445	64 225	8.6	12	-21.741	-42.670							
10	+45.560	+30.910			10	-25.559	+41.373			17	-21.625	-50.642	65 218	8.9					
13	+46.689	+59.980	64 218	9.1	10	-24.830	+15.315			12	-21.111	-17.448							
	71					21					71								
11	+47.820	+35.726			13	-24.554	+18.955			12	-15.197	-31.410							
10	+48.687	+31.026			18	-22.615	+34.689	64 226	9.0	15	-8.404	-22.363	65 220	9.6					
24	+63.316	+43.710	64 220	7.6	14	-21.931	+52.304			33	-7.707	-14.147	65 221	7.7					
10	+64.024	+8.105			19	-14.441	+30.561	64 227	8.7	15	-7.092	-64.419	66 173	9.6					
16	-59.499	-43.963			15	-13.108	+17.993	64 228	9.6	11	-6.208	-35.262							
10	-56.459	-44.399				43	-11.860	+3.131	65 219	6.7	12	+0.299	-28.016						
12	-52.741	-26.872			16	-9.770	+14.887			10	+0.409	-12.513							
13	-51.745	-41.230			14	-8.336	+43.910			14	+0.443	-35.290	65 222	9.6					
16	-50.696	-56.544			47	-4.647	+42.988	64 229	6.6	29	+0.473	-20.706	65 223	8.3					
15	-44.588	-2.610			15	-4.368	+23.175	64 230	9.4	11	+3.465	-29.085							
	81					31					81								
15	-36.916	-8.630	65 195	9.4	15	-4.175	+43.550	64 231	9.1	12	+4.172	-47.443							
15	-34.699	-3.753			14	+0.407	+60.070			16	+4.903	-39.763	65 224	9.6					
16	-34.480	-24.381	65 196	9.5	16	+1.704	+50.895	64 232	9.4	12	+6.997	-2.868							
18	-31.179	-20.689	65 197	9.4	13	+3.876	+57.983			16	+7.340	-4.787	65 225	9.6					
20	-24.739	-39.981	65 198	9.0	11	+6.036	+2.152			10	+8.332	-1.917							
13	-22.737	-7.590				14	+7.008	+33.439		18	+11.720	-29.441	65 226	8.8					
13	-22.191	-44.843			17	+8.620	+32.033			13	+13.073	-40.290							
11	-20.746	-1.359			17	+9.125	+18.315	64 233	9.1	20	+13.493	-44.449	65 227	8.6					
12	-20.021	-54.349			20	+9.407	+17.808	64 234	8.6	12	+13.859	-21.372							
11	-16.257	-37.790			11	+10.128	+35.705			13	+16.212	-61.921							
	91					41					91								
16	-12.761	-14.644	65 199	9.5	13	+14.817	+39.264			18	+19.757	-14.281	65 228	9.0					
14	-9.785	-0.797			12	+22.641	+46.909			14	+20.251	-7.600							
15	-5.599	-18.228	65 200	9.5	11	+24.804	+53.009			12	+22.945	-43.424							
34	+0.948	-52.412	65 201	7.6	44	+29.698	+11.261	64 235	6.5	15	+25.125	-50.478	65 229	9.6					
18	+7.121	-22.085	65 202	9.4	20	+30.011	+11.179			9	+26.161	-53.572							
44	+7.267	-18.772	65 203	7.3		12	+31.429	+12.873		17	+27.081	-24.722	65 230	9.4					
11	+11.951	-59.638			13	+35.701	+9.912			11	+28.405	-30.469							
9	+12.036	-26.629			17	+39.919	+27.236	64 236	8.7	12	+31.485	-43.319							
14	+12.370	-9.445			10	+40.972	+13.596			17	+31.734	-60.948	65 182	9.4					
12	+17.195	-20.210			16	+45.789	+3.875	65 231	9.4	12	+32.189	-16.518							
	101					12	+31.429	+12.873			101								
13	+20.210	-50.858			13	+35.701	+9.912			14	+37.253	-7.447							
18	+21.927	-34.836	65 204	9.5	17	+39.919	+27.236	64 236	8.7	13	+43.846	-33.426							
18	+24.315	-32.469	65 205	9.3	10	+40.972	+13.596			9	+44.290	-33.728							
13	+26.533	-9.747			16	+45.789	+3.875	65 231	9.4	10	+50.237	-20.393							
14	+28.043	-2.165				12	+31.429	+12.873		11	+51.374	-10.902							
13	+30.025	-30.817				13	+35.701	+9.912		10	+52.057	-0.593							
21	+30.801	-20.053	65 206	8.9	17	+39.919	+27.236	64 236	8.7	10	+52.399	-29.188							
14	+31.005	-0.165			10	+40.972	+13.596			16	+52.789	-6.228	65 232	9.6					
11	+31.537	-18.642			16	+45.789	+3.875	65 231	9.4	12	+53.477	-13.765							
11	+36.804	-50.578				12	+31.429	+12.873		14	+53.980	-55.850							
	111																		
20	+38.699	-37.920	65 207	8.9															
22	+51.299	-30.926	65 208	8.9															
17	+61.856	-39.292	65 209	9.5															

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 3h 27m, - 65°. Plate 530. 1892, Dec. 19. PROVISIONAL CONSTANTS. a = - .01131 d = - .00040 b = + .00061 e = - .01112 c = - .0092 f = - .1064 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51, 13 +45.034 +24.156 64 253 9.6 10 +45.548 +20.403 11 +45.870 +45.342 12 +45.959 +44.175 20 +46.170 +60.433 11 +46.336 +22.485 11 +52.699 +20.168 11 +57.939 +18.788 12 +58.345 +56.418 11 +58.430 +4.442 61 10 +60.053 +32.482 11 +64.555 +2.532 65 255 10.1 11 -63.849 -0.307 9 -63.831 -20.861 10 -63.422 -0.976 11 -63.357 -11.322 16 -62.291 -6.554 65 232 9.6 12 -61.059 -14.013 11 -57.611 -55.956 10 -56.855 -28.295 71 12 -56.497 -46.552 12 -54.888 -24.487 9 -52.387 -29.589 12 -51.313 -22.968 9 -50.480 -38.073 12 -49.800 -31.315 16 -49.600 -37.709 65 233 9.3 13 -47.490 -20.476 11 -46.735 -29.099 10 -46.347 -5.475 81 16 -37.108 -28.309 65 234 9.4 11 -33.771 -51.087 19 -33.617 -55.536 66 190 8.8 14 -33.606 -10.203 9 -30.989 -50.697 13 -29.503 -51.926 65 235 9.6 16 -27.998 -2.455 65 236 9.6 11 -23.929 -8.131 16 -23.344 -58.240 66 191 9.6 13 -20.484 -62.936 91 21 -20.382 -21.565 65 237 8.5 13 -19.175 -24.625 14 -19.128 -61.166 15 -18.761 -40.004 15 -17.461 -7.967 65 239 9.6 16 -11.017 -59.615 66 193 9.6 9 -9.806 -59.451 17 -8.146 -27.679 65 240 9.6 11 -5.510 -27.483 17 -5.456 -21.641 65 242 9.1 101 11 -4.390 -31.093 14 -1.004 -7.273 9 +0.535 -54.850 16 +5.791 -29.124 65 243 9.6 11 +6.683 -55.621 18 +10.605 -50.103 65 244 8.8 16 +13.393 -40.289 65 245 9.6 25 +15.258 -19.737 65 246 8.6 30 +16.155 -20.155 65 247 8.4 9 +16.752 -61.787					111, 11 +20.429 -25.902 12 +22.823 -27.601 13 +22.968 -19.280 13 +23.765 -59.653 66 197 8.5 11 +23.847 -41.840 21 +24.679 -63.010 66 198 8.7 21 +25.220 -45.596 65 250 8.7 17 +25.449 -30.423 65 249 9.4 9 +26.608 -55.763 9 +28.354 -50.044 121 34 +40.052 -2.896 65 251 7.7 16 +40.062 -31.969 65 252 9.3 16 +40.273 -18.135 10 +44.630 -30.873 11 +45.239 -30.151 21 +46.945 -25.013 65 253 8.9 11 +48.015 -14.854 13 +50.928 -24.351 10 +53.590 -52.299 13 +53.634 -20.846 181 12 +57.880 -18.365 12 +58.635 -0.294 65 254 9.7					PLATE CENTRE. 3h 45m, - 65°. Plate 531. 1892, Dec. 19. PROVISIONAL CONSTANTS. a = - .01148 d = - .00171 b = + .00158 e = - .01143 c = + .0693 f = - .0168 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f				
13	-54.525	+4.546			12	-35.799	+58.282	64	240	9.6	12	-64.294	+19.562		12	-57.446	+4.248		
12	-48.148	+38.122			11	-32.250	+21.599				13	-51.219	+2.802	65	255	10.1			
12	-43.376	+26.981			9	-31.511	+11.000				17	-51.001	+7.783	64	256	9.3			
13	-39.970	+23.313			14	-31.005	+26.141				18	-48.685	+26.201	64	257	9.1			
12	-37.228	+21.742			14	-30.076	+48.660	64	242	9.6	10	-48.393	+22.357						
12	-35.799	+58.282	64	240	9.6	16	-29.962	+23.873	64	241	9.6	21	-41.817	+38.253	64	258	8.8		
11	-32.250	+21.599			10	-29.914	+19.327				16	-41.059	+28.174	64	259	9.4			
9	-31.511	+11.000			11	-27.474	+26.872				15	-38.517	+62.024	64	260	9.3			
14	-31.005	+26.141			13	-26.425	+29.817				9	-38.243	+15.506						
14	-30.076	+48.660	64	242	9.6	14	-25.960	+39.596			20	-34.889	+47.792	64	261	8.9			
16	-29.962	+23.873	64	241	9.6	11	-25.201	+5.328			10	-33.999	+27.990						
10	-29.914	+19.327			14	-21.101	+0.562				9	-31.988	+2.841						
11	-27.474	+26.872			16	-20.019	+2.153	65	238	9.6	10	-31.312	+37.114						
13	-26.425	+29.817			10	-17.109	+64.672				10	-30.156	+48.818						
14	-25.960	+39.596			10	-10.737	+38.916				15	-24.752	+41.335	64	263	9.8			
11	-25.201	+5.328			18	-6.927	+19.694	64	244	8.9	30	-24.512	+29.421	64	262	8.5			
14	-21.101	+0.562			22	-6.533	+0.397	65	241	8.7	11	-22.039	+7.684						
16	-20.019	+2.153	65	238	9.6	28	-3.306	+25.135	64	245	8.3	9	-21.833	+21.335					
16	-17.109	+64.672			15	-2.277	+59.927	64	246	9.6	12	-18.127	+50.380						
10	-10.737	+38.916			12	-1.573	+53.536				19	-17.983	+28.761	64	266	9.2			
21	-6.927	+19.694	64	244	8.9	12	-1.544	+23.133			12	-15.979	+63.303						
22	-6.533	+0.397	65	241	8.7	13	+0.352	+21.167			10	-15.100	+13.488						
28	-3.306	+25.135	64	245	8.3	20	+3.128	+42.350	64	247	8.5	11	-14.173	+52.563					
15	-2.277	+59.927	64	246	9.6	14	+6.646	+44.607			9	-13.215	+53.744						
12	-1.573	+53.536			10	+6.724	+34.395				15	-12.937	+16.071	64	267	9.8			
12	-1.544	+23.133			18	+6.924	+64.658	64	248	8.9	31	-9.537	+36.005	64	268	10.1			
13	+0.352	+21.167			24	+12.892	+32.792	64	249	8.3	10	-8.467	+39.553						
20	+3.128	+42.350	64	247	8.5	10	+13.017	+49.389			34	-8.204	+58.371	64	269	8.3			
14	+6.646	+44.607			13	+13.723	+53.111				12	-5.789	+51.957						
10	+6.724	+34.395			10	+13.927	+53.271				28	-1.051	+37.210	64	270	8.5			
31	+6.924	+64.658	64	248	8.9	11	+14.790	+54.845			21	-0.935	+37.588	64	271	9.0			
24	+12.892	+32.792	64	249	8.3	10	+17.661	+47.949			9	+0.936	+5.325						
10	+13.017	+49.389			9	+17.708	+24.257				11	+2.296	+2.273	65	269	10.1			
13	+13.723	+53.111			26	+17.785	+0.630	65	248	8.5	12	+5.160	+4.265	65	270	10.1			
10	+13.927	+53.271			13	+18.518	+59.533				30	+6.244	+21.645	64	272	8.8			
11	+14.790	+54.845			41	+21.602	+59.783	64	250	8.4	10	+7.044	+5.436						
10	+17.661	+47.949			12	+25.246	+39.112				11	+9.371	+36.068						
9	+17.708	+24.257			18	+25.656	+14.689	64	251	9.6	12	+14.309	+23.421						
26	+17.785	+0.630	65	248	8.5	13	+30.277	+52.817			17	+16.154	+34.689	64	273	9.4			
13	+18.518	+59.533			18	+32.713	+31.359	64	252	9.6	10	+16.413	+17.170						
41	+21.602	+59.783	64	250	8.4	11	+30.231	+55.857			14	+16.819	+11.249	64	274	9.7			
12	+25.246	+39.112			11	+37.500	+54.975				9	+19.870	+47.267						
18	+25.656	+14.689	64	251	9.6	14	+37.850	+0.067			12	+23.328	+6.230	64	275	10.1			
13	+30.277	+52.817			16	+40.302	+21.238				10	+23.803	+37.282						
18	+32.713	+31.359	64	252	9.6	13	+41.308	+49.777			15	+26.605	+42.560	64	276	9.8			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.				
			No.	Mag.				No.	Mag.				No.	Mag.			
	51,					111,					51,						
9	+26'869	+48'430			19	+8'410	-13'754	65	271	9'2	43	+21'813	+30'471	64	305	6'2	
10	+27'501	+37'894	64	277	9	+8'677	-31'871				12	+24'653	+41'808				
13	+29'690	+13'647	64	278	10'1	11	+11'037	-37'538			21	+25'779	+7'908	64	306	8'4	
12	+31'002	+55'486	64	279	9'0	36	+11'424	-8'748	65	272	8'2	11	+27'301	+57'146	64	307	9'8
9	+32'779	+49'641			10	+11'897	-46'312				10	+29'163	+25'931				
9	+37'172	+11'959			11	+13'520	-50'732				10	+29'901	+57'225				
11	+37'191	+37'056			11	+13'932	-10'724	65	273	10'1	9	+32'929	+4'444				
10	+38'412	+7'862			12	+14'640	-11'745	65	274	10'1	15	+33'441	+2'013	65	306	9'5	
11	+39'161	+39'678			10	+23'327	-62'966				14	+46'607	+51'958	64	308	9'5	
10	+39'296	+56'786			9	+23'667	-62'078				9	+54'195	+50'170				
	61					121						61					
12	+40'196	+1'404	65	281	10'1	14	+24'749	-48'100	65	275	10'1	10	+55'173	+45'928			
13	+43'182	+6'336			14	+26'140	-23'296	65	276	9'8	12	+55'217	+23'678	64	309	9'2	
10	+43'373	+50'265			12	+26'483	-36'078	65	277	10'0	15	+56'867	+50'020	64	310	10'1	
10	+44'325	+6'476			11	+30'649	-43'530				10	+56'917	+37'541				
9	+47'126	+29'413			13	+30'719	-31'302	65	278	10'0	11	+56'925	+28'950	64	311	8'2	
10	+49'669	+2'072			11	+32'069	-34'025				13	+57'835	+23'446	64	312	10'1	
9	+50'791	+19'414			22	+32'989	-35'790	65	279	8'4	10	+59'593	+16'236				
9	+53'443	+58'751	64	280	10'1	12	+37'892	-5'957	65	280	9'7	12	+60'044	+19'706			
9	+62'408	+34'842			9	+39'292	-31'359				9	+61'164	+12'304				
15	+62'828	+3'121	65	293	9'4	13	+39'806	-37'774	65	282	10'1	14	+61'536	+1'288	65	318	10'1
	71					131						71					
13	+63'936	+21'965	64	282	10'1	15	+40'628	-55'165	65	283	9'2	11	+62'232	+8'269			
14	-62'854	-24'980			12	+40'721	-23'871				10	-61'560	-60'358	66	230	9'2	
15	-60'405	-21'291			10	+41'413	-55'449				12	-61'452	-33'491	65	288	10'1	
9	-58'203	-52'668			13	+42'076	-47'876	65	284	10'1	15	-55'365	-39'376	65	290	10'1	
13	-56'907	-0'452			10	+43'650	-41'728				20	-53'771	-35'921	65	291	8'7	
12	-56'351	-18'509			15	+44'609	-28'169	65	285	9'5	10	-53'705	-15'897	65	292	9'5	
14	-47'165	-13'561	65	256	9'5	13	+46'451	-26'817	65	286	10'0	13	-51'054	-29'845	65	294	7'7
11	-45'746	-49'809			18	+47'252	-3'020	65	287	9'1	9	-51'039	-22'831				
11	-40'261	-14'068	65	257	10'1	12	+47'690	-16'078			11	-50'792	-45'695				
10	-39'105	-10'361			10	+48'894	-5'367				11	-50'350	-48'191				
	81					141						81					
12	-37'519	-48'201	65	258	10'0	16	+49'126	-59'782	66	230	9'2	10	-48'310	-50'198			
28	-35'878	-37'061	65	259	8'7	13	+51'128	-32'985	65	288	10'1	10	-47'427	-34'446			
11	-35'312	-49'067			12	+51'190	-55'260	65	289	10'1	12	-44'558	-41'629				
9	-32'642	-1'825			9	+51'814	-48'819				18	-16'045	+61'555	64	295	9'0	
9	-29'373	-47'388			9	+55'334	-10'378				20	-13'532	+9'252	64	296	8'7	
14	-28'179	-14'320	65	260	9'3	20	+56'785	-39'268	65	290	10'1	13	-12'997	+57'423	64	297	10'1
12	-23'417	-19'937	65	261	10'1	11	+58'617	-35'946	65	291	8'7	11	-10'799	+55'093			
10	-20'178	-30'787			15	+60'123	-16'007	65	292	9'5	10	-10'469	+62'706				
11	-19'207	-27'659	65	262	10'1	10	+60'917	-45'918			10	-9'039	+54'888				
12	-16'595	-61'953	66	209	9'7	9	+61'171	-48'446			15	-7'625	+40'586	64	298	9'1	
	91					151						31					
12	-15'524	-61'186	66	210	9'7	36	+61'764	-30'077	65	294	7'7	10	-5'907	+54'308			
68	-13'209	-7'455	65	263	4'8	10	+62'276	-23'081			9	-5'813	+11'474				
11	-12'616	-19'221									10	-5'249	+41'892				
16	-5'046	-57'205	66	213	9'1						11	-5'106	+53'312				
13	-4'468	-23'726	65	264	10'1						10	-3'422	+16'532				
11	-3'872	-12'128									9	-2'854	+1'049				
9	-3'078	-64'244									10	-0'470	+58'775				
16	-1'053	-31'708	65	265	9'4						11	+4'098	+9'461				
14	-0'124	-5'695	65	266	9'5						14	+5'441	+34'297	64	299	10'1	
10	+0'244	-36'632									16	+6'035	+35'880	64	300	9'5	
	101											41					
9	+0'428	-60'383									12	+9'707	+51'345	64	301	10'1	
12	+1'189	-17'538	65	267	10'1						16	+10'656	+48'771	64	302	9'0	
11	+1'368	-54'093									9	+11'404	+63'952				
11	+1'855	-3'837	65	268	10'1						11	+12'666	+44'027				
9	+3'623	-52'338									12	+13'420	+38'877	64	303	10'1	
10	+4'938	-52'530									11	+13'726	+13'921				
12	+5'663	-62'587	66	216	10'1						10	+14'223	+55'271				
10	+6'210	-58'771									12	+18'443	+25'277				
10	+6'568	-53'950									13	+18'499	+20'813	64	304	10'1	
9	+6'912	-15'538									9	+19'693	+58'739				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					PLATE CENTRE.					51				111				
	+13°438	-29°491				4h 21m, - 65°.					9 - 1°979	+20°324			12 -48°463	-38°119	65° 319	10°1	
10	+16°034	-42°253				Plate 533. 1892, Dec. 19.					9 + 3°963	+25°463			34 -47°309	-13°625	65° 320	7°7	
14	+17°355	- 5°889	65° 302	10°1		PROVISIONAL CONSTANTS.					10 + 9°288	+43°002			11 -42°477	-45°316			
15	+17°497	-20°290	65° 303	10°1		$a = -°01158$	$d = -°00066$				9 + 11°319	+ 4°015			9 -40°373	- 3°806			
17	+19°433	-40°884	65° 304	9°4		$b = +°00049$	$e = -°01140$				14 + 12°079	+ 5°562	64° 326	9°6	11 -39°228	-10°991			
						$c = -°1169$	$f = -°0954$												
						To obtain standard co-ordinates, ξ, η					14 + 12°634	+36°954	64° 327	9°4	9 -39°040	-21°252			
						$\xi = x + ax + by + c$					9 + 15°251	+ 2°834			13 -36°606	-16°140	65° 321	10°1	
						$\eta = y + dx + ey + f$					24 + 15°327	+35°473	64° 328	8°8	14 -33°459	- 9°716			
10	+19°469	-34°173									25 + 15°346	+30°782	64° 329	8°9	12 -33°053	- 9°722			
10	+19°619	-44°329									15 + 15°583	+35°604	64° 330	9°4	20 -32°780	-23°974	65° 322	8°7	
10	+22°349	-35°140	65° 305	8°2															
22	+27°881	-51°135																	
11	+28°911	-23°177																	
	121																		
13	+33°413	-53°563	65° 307	10°1	10	-63°968	+45°610				14 + 18°309	+16°659	64° 331	9°6	9 -30°549	-13°184			
13	+34°021	-34°342	65° 308	10°1	13	-62°562	+49°826	64° 310	10°1		15 + 19°849	+63°796	64° 332	9°3	20 -29°943	-53°203	65° 323	8°7	
11	+37°210	-29°772			16	-62°326	+23°422	64° 309	9°2		11 + 21°358	+32°701	64° 333	9°9	10 -29°477	-56°980			
10	+37°653	-42°653			10	-61°622	+37°387				36 + 21°547	+41°577	64° 334	8°4	12 -28°637	-26°060	65° 324	10°1	
16	+41°636	-36°210	65° 309	8°8	28	-61°018	+28°801	64° 311	8°2		13 + 21°689	+11°071	64° 336	9°6	10 -27°819	-37°787			
16	+42°535	-28°967	65° 311	9°8	14	-59°605	+23°374	64° 312	10°1		9 + 21°763	+40°926			11 -27°197	-13°626			
11	+42°690	-50°718			11	-57°473	+16°300				14 + 21°800	+32°778	64° 335	9°4	18 -26°991	-19°857	65° 325	9°2	
18	+43°268	- 3°862	65° 310	9°2	12	-57°229	+19°793				10 + 22°845	+38°796			12 -26°121	-12°956			
12	+43°443	-10°688			11	-55°870	+50°647				11 + 23°587	+49°121			15 -25°325	- 5°747	65° 326	9°7	
9	+43°802	- 5°434			9	-55°593	+12°484				12 + 23°589	+ 0°673	65° 337	9°6	21 -24°122	-57°863	66° 271	8°1	
	131																		
9	+46°648	-38°354			10	-54°529	+44°557				10 + 29°490	+47°896			19 -23°107	-13°002	65° 327	8°9	
20	+49°358	-40°714	65° 312	8°4	14	-54°427	+ 1°524	65° 318	10°1		20 + 30°102	+45°401	64° 337	9°0	11 -21°911	-41°286			
13	+50°933	-48°188	65° 314	10°1	12	-54°229	+ 8°510				20 + 32°456	+39°680			12 -20°025	-35°669			
10	+50°945	-18°149	65° 313	9°5	13	-48°809	+30°164				9 + 34°738	+38°564	64° 338	9°0	9 -19°531	- 5°667			
11	+51°523	-61°216			18	-48°671	+53°978	64° 314	9°2		32 + 37°577	+60°304	64° 339	8°6	11 -16°706	-41°944			
11	+53°187	-28°337			11	-47°708	+18°664				13 + 41°495	+31°596	64° 340	9°8	22 -14°511	-20°864	65° 328	8°8	
15	+55°955	-23°773	65° 315	10°1	15	-46°011	+52°641	64° 315	9°8		10 + 44°423	+64°213			12 -12°040	-62°370	66° 274	10°1	
12	+56°566	-45°740			10	-43°113	+ 6°822				15 + 46°198	+34°107	64° 341	9°3	16 -11°294	- 2°171	65° 329	9°7	
12	+58°118	-56°042			10	-41°695	+30°955				21 + 46°304	+12°658	64° 342	8°9	14 -11°220	- 8°723	65° 330	9°5	
24	+58°472	-53°538	65° 317	8°4	15	-41°674	+42°303	64° 316	10°1		10 + 46°389	+53°726			11 -10°307	- 4°380			
	141																		
12	+59°303	- 3°328	65° 316	10°1	12	-41°180	+33°747				9 + 46°590	+53°936			9 - 8°970	-30°729			
12	+61°018	-13°958			11	-39°448	+24°719				16 + 48°603	+45°834	64° 343	9°0	10 - 7°177	-15°163			
12	+61°959	-14°776			11	-36°439	+29°275				11 + 48°733	+52°750			13 - 4°096	-49°315	65° 331	9°6	
13	+63°417	- 6°158			38	-34°345	+26°398	64° 317	7°5		12 + 48°952	+41°680	64° 344	9°9	15 - 3°038	-64°751	66° 278	9°2	
9	+64°404	-25°201			9	-33°756	+31°971				16 + 49°159	+ 2°076	65° 348	9°5	9 - 1°392	-23°779			
11	+64°447	-12°308			11	-33°747	+12°010				18 + 51°078	+ 2°982	64° 345	9°0	13 + 4°365	-36°257	65° 332	9°5	
13	+64°684	-38°680	65° 319	10°1	13	-32°848	+14°043	64° 318	10°1		15 + 53°711	+42°563	64° 346	9°4	13 + 5°449	-35°158	65° 333	9°8	
					13	-29°622	+29°503	64° 319	10°1		9 + 55°530	+ 2°351			20 + 6°368	-58°335	66° 280	8°8	
					11	-28°783	+43°714				12 + 58°588	+47°046	64° 347	9°6	12 + 7°275	-16°464	65° 334	9°6	
					11	-27°970	+51°634				15 + 59°114	+ 3°012	64° 348	9°4	10 + 8°351	- 3°904			
						31													
					22	-27°518	+51°371	64° 320	8°5		9 + 59°150	+ 3°246			11 + 10°668	-27°353			
					13	-25°640	+28°396	64° 321	10°1		14 + 60°736	+28°246	64° 349	9°3	12 + 16°310	-42°023			
					15	-24°736	+15°340	64° 322	10°1		9 + 62°468	+33°410			9 + 17°443	-36°296			
					13	-21°445	+27°537	64° 323	10°1		11 + 62°829	+16°472			11 + 21°166	-61°201			
					9	-21°210	+11°264				15 + 64°072	+26°318	64° 350	9°1	18 + 22°420	-47°732	65° 335	9°2	
					9	-20°705	+21°858				9 + 64°769	+48°137			9 + 22°425	-41°100			
					10	-19°564	+44°793				18 -63°609	-41°256	65° 312	8°4	13 + 23°151	-48°038	65° 338	9°8	
					10	-19°231	+24°147				15 -63°595	-18°625	65° 313	9°5	15 + 23°383	-12°362	65° 336	9°3	
					10	-19°132	+10°158				12 -61°475	-48°594	65° 314	10°1	34 + 24°267	-62°925	66° 285	8°1	
					10	-17°381	+53°268				10 -60°638	-28°616			10 + 27°087	-34°771			
						41													
					12	-15°701	+51°078				10 -59°940	-61°484			10 + 27°512	-54°506			
					11	-15°106	+48°526				10 -58°446	-21°773			9 + 28°749	-35°262			
					9	- 8°851	+29°379				13 -58°205	-23°867	65° 315	10°1	21 + 29°708	-53°098	65° 339	8°8	
					9	- 7°493	+31°270				13 -56°326	- 3°229	65° 316	10°1	20 + 30°527	-48°962	65° 340	9°1	
					9	- 6°563	+41°074				12 -53°845	-13°724			10 + 30°696	-10°313			
					16	- 5°343	+52°660				21 -53°580	-53°378	65° 317	8°4	11 + 30°868	-54°461			
					13	- 4°272	+35°636	64° 325	10°1		11 -52°855	-14°465			9 + 31°723	-40°475			
					10	- 3°654	+50°782				14 -52°032	- 5°786			11 + 32°263	-44°224			
					10	- 2°420	+ 2°472				12 -50°569	-11°825			15 + 32°680	-43°948	65° 341	9°4	
					11	- 2°365	+32°815				10 -49°699	-24°703			12 + 34°258	-57°992	66° 289	9°8	

4^h 39^m. - 65°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171					PLATE CENTRE.					51					111			
						4h 39m, - 65°.													
						Plate 1184. 1894, Dec. 19.													
						PROVISIONAL CONSTANTS.													
						$a = - .01148 \quad d = + .00095$													
						$b = - .00098 \quad e = - .01116$													
						$c = + .0086 \quad f = - .0131$													
						To obtain standard co-ordinates, ξ, η													
						$\xi = x + ax + by + c$													
						$\eta = y + dx + ey + f$													
	181																		
10	+34.807	- 2.852																	
13	+38.584	-25.043	65	342	9.8														
11	+39.676	-53.569																	
10	+40.596	- 0.948																	
15	+41.332	- 5.416	65	343	9.5														
36	+42.202	-57.077	65	344	8.5														
21	+42.472	-56.953	65	345	8.8														
11	+42.906	-42.786																	
13	+43.822	-28.383	65	346	9.8														
10	+45.260	- 4.876																	
	181																		
11	+45.363	-14.422																	
24	+46.306	- 7.785	65	347	8.8														
11	+49.435	-20.881																	
10	+49.746	-40.599																	
40	+49.857	-36.638	65	349	7.9														
10	+51.475	-11.604																	
9	+54.138	-14.494																	
10	+59.237	- 1.864																	
12	+59.690	-59.422	66	298	9.6														
12	+60.934	-60.310	66	299	9.3														
	191																		
9	+61.338	-13.428																	
9	+61.859	- 7.558																	
10	+62.410	-13.322																	
9	+62.498	-11.118																	

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
No.		Mag.			No.		Mag.			No.		Mag.			No.		Mag.		
No.		Mag.			No.		Mag.			No.		Mag.			No.		Mag.		
PLATE CENTRE.																			
4h 57m, - 65°.																			
Plate 543. 1892, Dec. 20.																			
PROVISIONAL CONSTANTS.																			
a = - .01159 d = - .00097																			
b = + .00044 e = - .01151																			
c = - .1363 f = - .0293																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.				
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.			
	171,					PLATE CENTRE. 5h 15m, - 65°. Plate 544. 1892, Dec. 20. PROVISIONAL CONSTANTS. a = - .01148 d = - .00073 b = + .00076 e = - .01120 c = + .1248 f = - .0423 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51,					111,						
15	+28.101	-58.022	65	413	9.7					15	+ 0.722	+58.319	64	435	9.5	10	-42.132	-57.658				
13	+28.439	-29.385	65	412	10.0					9	+ 1.380	+62.772				11	-40.302	-49.551				
16	+28.759	-43.952	65	414	9.3					10	+ 2.227	+61.494				16	-39.576	-61.365				
10	+29.991	-03.028	66	362	9.3					12	+ 3.344	+23.449				13	-39.147	-25.341				
16	+30.735	-10.049	65	415	9.3					11	+ 3.840	+37.370				26	-38.658	-15.846	65	435		
																			8.7			
13	+31.357	-35.405	65	418	9.8					10	+ 4.783	+39.755				20	-34.274	-10.331	65	437		
16	+31.414	- 3.589	65	410	9.5					10	+ 5.606	+50.807				14	-31.093	-39.055	65	436		
28	+31.500	- 2.955	65	417	8.8					17	+ 5.955	+32.735	64	436	9.3	13	-34.061	-27.104		10.0		
10	+32.929	-57.939								9	+ 6.745	+52.404				13	-33.627	-32.965	65	438		
13	+34.580	-46.029								10	+ 7.158	+46.181				16	-33.282	-40.827	65	439		
	181										61						121					
14	+36.689	-61.094	66	368	10.0	12	-64.975	+14.388	64	408	9.7	10	+ 7.371	+35.784		10	-32.667	- 3.687				
15	+37.262	-14.092	65	420	9.5	13	-62.684	+28.648	64	410	9.7	15	+ 7.764	+54.439		12	-31.829	-49.007				
24	+41.389	- 9.442	65	421	8.9	10	-61.938	+51.116	64	411	10.0	10	+10.275	+12.091		14	-31.817	-31.598				
13	+41.656	-34.027	65	422	9.8	9	-60.346	+25.703	64	412	10.0	11	+13.284	+16.241		9	-29.503	-58.158				
13	+44.483	-15.680				9	-55.845	+32.961				13	+16.147	+ 8.486		15	-26.902	-62.974				
22	+45.363	-55.018	65	423	9.1	18	-52.472	+ 1.723	64	413	9.1	13	+16.215	+17.867		15	-26.537	-48.728	65	440		
12	+47.297	-11.500				17	-51.449	+19.297	64	414	9.3	9	+17.569	+51.740		12	-26.465	-56.331		9.8		
11	+49.716	-52.093				11	-51.257	+34.661				10	+19.787	+36.047		13	-26.155	-26.875				
14	+50.681	- 8.110	65	424	9.8	11	-50.061	+48.081	64	415	10.0	13	+23.617	+40.930		13	-25.504	-64.490				
14	+52.226	-50.169				11	-48.350	+45.524				12	+24.328	+48.967		10	-24.935	-30.983				
	191										71						131					
15	+52.823	-16.361	65	425	10.0	9	-46.941	+57.326				16	+25.886	+14.117	64	437	9.5	13	-22.927	-31.317		
16	+53.102	-41.745	65	426	9.7	14	-46.041	+29.399				9	+26.161	+51.091		38	-21.419	-17.939	65	441		
19	+57.154	-58.090	65	427	9.3	10	-45.592	+35.206				10	+27.375	+23.203		12	-21.199	-28.259				
9	+58.041	- 7.894				15	-43.998	+56.197	64	416	9.2	13	+27.673	+50.643		10	-18.458	-61.049				
22	+58.464	-31.752	65	428	8.5	12	-43.067	+ 6.210				15	+30.057	+12.499	64	438	9.7	11	-16.246	- 2.753		
15	+59.496	-41.478	65	429	10.0	13	-40.577	+39.528	64	417	10.0	9	+30.426	+45.431		17	-13.978	- 5.613	65	442		
18	+59.747	-49.489	65	431	9.4	19	-38.367	+29.426	64	418	9.1	11	+32.594	+17.212		32	-12.513	-21.217	65	443		
18	+59.940	-41.896	65	430	9.4	11	-37.025	+50.166				14	+33.909	+25.830		9	-11.879	- 0.829		7.5		
10	+60.515	- 6.772				19	-36.095	+19.652	64	419	9.1	26	+35.423	+50.032	64	439	8.3	12	- 9.709	-62.116		
13	+60.721	-12.876				10	-35.635	+ 9.205				20	+35.475	+23.293	64	440	9.7	12	- 9.062	-17.231		
	201										81						141					
13	+60.999	-46.814				11	-34.793	+ 0.002				12	+35.770	+ 6.740		10	- 8.525	-53.226				
16	+64.210	-43.629	65	432	9.8	12	-34.005	+36.644				40	+35.794	+34.129	64	441	8.0	14	- 6.151	-49.360	65	446
16	+64.892	-58.347	65	433	9.8	10	-33.371	+21.608				11	+41.627	+30.572		9	+ 0.654	- 4.034		10.0		
						24	-31.993	+35.315	64	420	8.9	12	+42.528	+49.975		11	+ 1.529	-39.526				
						22	-31.420	+37.485	64	421	9.1	9	+44.131	+ 3.808		16	+ 2.337	-63.480	66	389		
						12	-30.246	+22.856				11	+47.815	+ 3.243		10	+ 2.584	-47.693				
						14	-29.930	+51.844	64	422	10.0	11	+52.084	+13.997		10	+ 2.676	-41.701				
						12	-23.866	+30.726				11	+52.404	+53.638		11	+ 2.992	-47.405				
						11	-23.077	+ 5.363				9	+53.174	+19.839		12	+ 3.760	- 2.840	65	447		
						17	-22.045	+14.735	64	423	9.5	11	+53.741	+52.008		11	+ 3.972	-54.816		10.0		
											91						151					
						14	-21.192	+51.540	64	424	10.0	10	+53.751	+41.342		9	+ 4.091	-34.045				
						9	-20.889	+50.430				10	+54.145	+50.293		9	+ 6.063	-24.150				
						16	-20.592	+51.284	64	425	9.5	13	+56.147	+38.903		10	+ 7.813	-50.621				
						12	-19.473	+31.807	64	426	10.0	20	+60.770	+32.082	64	442	8.8	15	+11.076	-64.155	66	393
						13	-19.090	+31.075	64	427	10.0	15	-61.735	-16.749	65	425	10.0	9	+11.525	-35.752		
						16	-18.640	+39.282	64	428	9.5	15	-59.667	-42.075	65	426	9.7	10	+11.965	-42.032	65	448
						14	-17.039	+41.848	64	429	9.8	9	-57.125	- 7.964		16	+13.126	-21.688	65	449		
						12	-16.166	+35.238				24	-55.028	-31.692		12	+13.930	- 0.018	65	450		
						10	-14.684	+35.628				11	-54.746	- 6.634		10	+14.203	-50.107		10.0		
						15	-11.773	+15.120	64	430	9.8	20	-54.455	-58.076	65	427	9.3	11	+15.386	-40.849		
											101						161					
						20	-11.165	+25.408	64	431	8.9	13	-54.122	-12.715		16	+15.449	-12.907	65	451		
						12	- 9.817	+28.367				14	-53.308	-41.354	65	429	10.0	15	+17.415	-2		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	171				PLATE CENTRE. 5h 33m, - 65°. Plate 136. 1892, Jan. 30. PROVISIONAL CONSTANTS. a = - .01206 d = + .00024 b = - .00046 e = - .01180 c = + .2142 f = - .1836 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f															
10	+22.823	-40.550			26	-57.076	+32.363	64	442	8.8	22	-0.414	+31.540	64	458	8.4	9	+56.941	+37.967	
13	+23.725	-38.744			9	-55.552	+2.980				13	+2.190	+62.903	63	464	10.0	9	+58.051	+18.290	
11	+23.765	-46.656			10	-51.609	+26.326				10	+4.764	+36.422				9	+60.467	+52.597	
13	+25.308	-10.302			10	-51.266	+55.996	64	443	10.0	14	+8.858	+11.256				10	+60.653	+59.845	
11	+26.516	-28.732			14	-49.082	+23.447	64	444	10.0	9	+9.308	+14.490				11	+62.126	+52.698	
9	+26.581	-48.488			14	-48.082	+9.724				13	+10.256	+50.117				13	+62.499	+3.474	
11	+27.499	-63.922			14	-46.404	+39.098	64	445	9.5	10	+10.926	+34.329				9	+62.614	+20.917	
10	+27.785	-45.656			11	-46.236	+35.355				10	+12.285	+8.534				13	+64.334	+13.681	
9	+27.957	-11.340			52	-45.081	+35.649	64	446	7.0	14	+13.051	+45.855				9	+64.677	+9.085	
22	+28.317	-42.022	65	455	8.7	11	-44.212	+40.424			13	+13.148	+13.047				10	-62.832	-53.111	
	181																			
14	+28.643	-15.065	65	454	10.0	44	-43.882	+18.785	64	447	8.4	16	+13.681	+33.931				9	-60.997	-1.777
14	+29.707	-33.098				14	-43.842	+53.144	64	448	9.5	11	+15.187	+13.139				30	-60.278	-16.572
15	+30.936	-48.120				10	-42.914	+47.477				22	+15.776	+61.660	64	459	9.2	65	-58.788	-8.944
16	+33.193	-52.187	65	456	9.5	9	-42.574	+39.327				15	+16.846	+23.924				10	-58.716	-34.593
10	+35.121	-33.692				13	-42.513	+37.664	64	449	10.0	10	+17.570	+11.458				13	-54.247	-4.051
12	+35.490	-12.087				11	-41.128	+5.047				12	+17.722	+38.050				13	-52.922	-20.778
11	+35.710	-9.456				12	-39.461	+3.530				10	+17.726	+63.691				9	-52.818	-29.638
19	+35.880	-54.672	65	457	8.9	10	-39.452	+9.441				18	+18.105	+10.475	64	460	10.0	13	-52.702	-38.732
9	+36.981	-36.251				12	-38.963	+6.560				9	+18.635	+1.029				24	-52.100	-37.344
12	+37.009	-29.621				13	-37.631	+21.020				10	+18.771	+7.064				16	-51.742	-37.893
	191						21													
10	+38.550	-5.529				11	-37.406	+30.996				28	+19.169	+10.011	64	461	8.8	11	-51.303	-10.650
11	+38.595	-57.785				12	-32.749	+25.557				18	+19.240	+8.961	64	462	10.0	15	-51.191	-26.090
11	+38.962	-51.495				22	-32.383	+10.653	64	450	9.7	10	+19.623	+14.299				14	-49.974	-53.983
13	+39.111	-60.256	66	404	10.0	12	-31.727	+35.098				16	+21.005	+23.045				9	-48.671	-10.858
16	+39.374	-12.598	65	458	9.7	12	-30.909	+20.689				10	+21.374	+11.131				17	-48.639	-4.926
10	+39.840	-51.842				18	-30.348	+27.546	64	451	10.0	9	+21.513	+28.041				11	-48.411	-28.377
20	+39.971	-58.803	65	462	9.4	15	-30.205	+11.986				12	+21.584	+33.395				17	-48.389	-40.874
20	+40.154	-51.545	65	461	9.5	19	-29.848	+0.622	65	474	9.5	13	+22.426	+28.341				14	-47.737	-15.667
18	+40.184	-44.978	65	460	9.3	11	-29.255	+38.096				10	+23.137	+48.220				13	-47.372	-19.942
14	+40.346	-53.179				9	-28.882	+26.444				10	+23.478	+29.137				36	-45.822	-50.533
	201						31													
10	+40.538	-6.714				9	-28.734	+4.370				11	+26.107	+5.609				10	-45.544	-26.284
16	+40.657	-19.913	65	459	9.7	9	-28.704	+47.904				12	+26.731	+6.468				15	-43.184	-51.982
9	+41.080	-10.586				11	-28.110	+27.076				10	+26.813	+31.644				14	-42.890	-28.634
9	+41.689	-55.629				10	-28.055	+46.645				14	+27.346	+35.080				13	-42.617	-23.449
14	+41.965	-11.455				12	-24.835	+27.320				12	+28.547	+31.379				15	-41.575	-14.882
10	+43.058	-58.765				12	-22.735	+15.423				19	+28.641	+5.515	64	463	10.0	17	-41.056	-6.079
9	+43.711	-40.773				68	-22.423	+60.637	64	452	6.7	12	+28.773	+44.520				13	-40.973	-60.082
9	+44.216	-38.512				17	-21.647	+0.974	65	478	10.0	16	+29.418	+32.865				17	-38.950	-39.129
13	+45.180	-45.496				14	-20.203	+3.783				17	+29.499	+6.787				13	-38.768	-38.791
18	+45.755	-50.864	65	463	10.0	10	-19.454	+37.595				30	+29.679	+2.145	64	464	8.7	11	-38.006	-22.308
	211						41													
14	+49.052	-52.748	65	464	10.0	12	-17.582	+63.592	63	459	10.0	11	+30.166	+33.047				13	-37.277	-38.565
12	+51.553	-35.610				10	-16.871	+7.482				11	+31.486	+10.877				13	-37.209	-37.779
18	+54.151	-16.479	65	465	8.9	15	-16.273	+26.192				9	+32.900	+0.429				19	-34.246	-46.336
9	+54.451	-1.680				20	-15.767	+21.857	64	453	9.5	14	+33.643	+28.764				10	-34.177	-46.164
11	+54.453	-34.579				9	-15.228	+29.760				18	+34.603	+51.715	64	465	9.3	11	-32.836	-2.110
14	+56.156	-8.986	65	466	10.0	12	-14.558	+14.012				15	+34.715	+21.993				10	-30.354	-28.979
10	+60.131	-39.132				10	-14.416	+6.620				10	+35.840	+3.225				12	-29.986	-11.725
16	+60.850	-37.776	65	467	9.3	17	-14.009	+50.849	64	454	9.4	9	+36.715	+1.885				44	-28.827	-32.161
12	+61.022	-4.430				13	-13.834	+7.230				11	+36.719	+58.613	64	466	10.0	14	-28.820	-44.151
14	+61.169	-38.354				10	-13.385	+22.361				19	+37.789	+9.227	64	467	9.6	14	-27.879	-25.451
	221																			
11	+61.186	-21.187				12	-17.582	+63.592	63	459	10.0	11	+30.166	+33.047				13	-37.277	-38.565
10	+61.805	-54.549				10	-16.871	+7.482				11	+31.486	+10.877				13	-37.209	-37.779
10	+62.543	-26.618				15	-16.273	+26.192				9	+32.900	+0.429				19	-34.246	-46.336
9	+63.024	-53.689				20	-15.767	+21.857	64	453	9.5	14	+33.643	+28.764				10	-34.177	-46.164
9	+63.498	-11.216				9	-15.228	+29.760				18	+34.603	+51.715	64	465	9.3	11	-32.836	-2.110
10	+64.320	-41.593				14	-14.558	+14.012				15	+34.715	+21.993				10	-30.354	-28.979
						10	-14.416	+6.620				10	+35.840	+3.225				12	-29.986	-11.725
						17	-14.009	+50.849	64	454	9.4	9	+36.715	+1.885				44	-28.827	-32.161
						13	-13.834	+7.230				11	+36.719	+58.613	64	466	10.0			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.														
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.													
	171,					231,					PLATE CENTRE. 5h 51m, - 65°.					51,																
10	-27°826	-13°149	65	476	8°1	13	+14°443	-3°485	65	485	9°5	Plate 557. 1893, Jan. 9.				10	+31°167	+0°197	64	499	10°1											
22	-27°070	-4°620				11	+14°708	-63°557				PROVISIONAL CONSTANTS.				10	+32°777	+47°297														
11	-26°650	-4°230				13	+14°738	-9°985				$a = -0.01149$	$d = -0.00070$	11	+34°700	+46°043																
10	-25°020	-11°995				16	+16°287	-1°386				$b = +0.00063$	$e = -0.01148$	9	+36°003	+43°958																
12	-24°838	-61°103	65	477	9°8	10	+17°175	-40°052	65	486	9°8	$c = +0.0469$	$f = -0.0141$	9	+40°154	+3°862	64	500	9°6													
13	-23°415	-4°987				15	+18°617	-61°526				To obtain standard co-ordinates, ξ, η				9				+40°510	+58°077											
11	-23°198	-23°011				16	+19°083	-14°329				$\xi = x + ax + by + c$	$\eta = y + dx + ey + f$	14	+42°589	+41°665																
11	-23°130	-18°614				14	+20°547	-2°532				20		+43°118	+1°825																	
17	-21°827	-55°302	12	+22°731	-49°436	65	487	9°2	11	+43°572	+26°016																					
13	-21°804	-37°686	13	+23°036	-30°899				13	+44°592	+53°581																					
	181			241								64		501	9°9																	
15	-19°757	-44°474	65	479	8°5	11	+24°825	-59°599	65	488	9°4	12	-57°011	+52°670	64	473	9°4	28	+45°082	+49°862	64	503	8°9									
10	-19°713	-42°726				13	+25°013	-5°516				9	-53°112	+3°628	9	+45°756	+14°782	13	+45°756	+14°782	13	+45°756	+14°782	64	504	10°0						
12	-19°455	-38°539				13	+25°554	-19°051				14	-46°852	+36°444	64	475	9°4	12	+45°976	+26°119	64	504	10°0									
13	-19°363	-36°290				11	+26°182	-16°175				9	-45°245	+18°568	64	478	9°3	16	+47°851	+15°521	64	505	9°6									
9	-18°917	-42°900	65	480	9°5	9	+27°199	-42°124	65	489	9°4	9	-43°848	+4°806	64	479	9°4	17	+49°178	+36°706	64	507	9°1									
16	-18°071	-47°650				11	+28°023	-16°448				14	-43°773	+11°644	64	476	9°4	20	+49°516	+47°098	64	506	9°3									
9	-17°992	-60°352				10	+28°284	-17°875				10	-42°269	+27°009	10	-42°269	+27°009	10	+50°711	+34°491	10	+50°711	+34°491	64	508	9°4						
9	-17°165	-60°000				13	+29°502	-44°730				11	-40°849	+27°133	9	+52°157	+37°271	9	+52°157	+37°271	64	508	9°4									
20	-14°595	-32°743	65	481	10°0	12	+29°625	-17°901	65	490	9°0	10	-40°219	+64°079	63	477	10°1	14	+52°477	+31°162	64	508	9°4									
16	-14°304	-11°937				10	+30°239	-0°354				9	-35°026	+47°284	9	+53°188	+63°739															
	191						251					9	11																			
12	-13°003	-10°553				15	+31°572	-42°452	9	-33°224	+63°157	63	480	10°1	12	+54°339	+32°186	64	509	9°9												
13	-12°777	-33°101	65	482	10°0	12	+31°606	-18°251	65	491	9°0	9	-31°816	+16°775	43	+56°748	+40°892	64	510	7°9												
16	-11°849	-42°366				10	+32°485	-30°339				22	-27°995	+12°306	64	477	8°8	9	+58°687	+49°328	9	+58°687	+49°328	64	509	9°4						
12	-11°406	-48°882				10	+33°338	-29°534				15	-26°895	+58°651	64	478	9°3	10	+58°915	+13°324	10	+58°915	+13°324	63	509	9°4						
13	-10°192	-26°399				12	+34°495	-3°555				15	-26°177	+23°705	64	479	9°4	11	+60°080	+62°905	63	509	9°4									
13	-10°060	-17°684	65	483	8°2	15	+36°013	-51°087	65	492	8°9	11	-22°987	+20°942	64	480	10°0	11	+64°009	+62°917	63	513	9°4									
10	-9°412	-55°035				9	+36°771	-20°395				14	-22°944	+35°464	64	481	9°4	26	-61°960	-31°125	65	491	9°0									
13	-9°226	-28°578				11	+36°802	-50°398				9	-22°871	+3°825	9	-59°405	-44°551	9	-59°405	-44°551	65	492	8°9									
13	-9°184	-44°858				18	+37°012	-19°015				13	-20°012	+36°650	64	483	9°4	28	-55°576	-11°502	65	492	8°9									
9	-7°990	-41°839	65	484	9°4	12	+37°639	-35°775	65	493	8°8	17	-19°997	+59°504	64	484	9°4	10	-54°636	-23°510	65	494	8°9									
	201						261					9	-17°045	+19°104	64	485	9°9	94	-39°920	-47°467				65	496	5°0						
9	-7°875	-6°739				13	+37°940	-37°869				9	-12°785	+34°469	10	-10°433	+35°422	24	-45°823	-9°251				65	495	9°0						
12	-6°814	-15°843				19	+40°139	-27°286				10	-10°061	+48°282	64	487	9°4	26	-45°753	-32°821				65	494	8°9						
15	-4°726	-58°145	65	485	9°9	9	+40°705	-32°352	65	494	10°1	9	-2°616	+2°807	64	485	9°9	94	-39°920	-47°467	65	496	5°0									
17	-4°264	-54°044				9	+43°952	-35°778				13	-2°616	+2°807	64	487	9°4	16	-39°580	-21°839	65	497	9°4									
10	-4°179	-50°105				13	+44°211	-28°073				9	-1°955	+34°696	64	486	7°2	18	-39°045	-33°382	65	498	9°3									
16	-2°650	-45°272				11	+44°520	-45°444				44	-1°156	+57°337	64	486	7°2	9	-36°870	-36°235	65	499	9°6									
12	-2°482	-31°440	65	486	8°2	9	+44°721	-26°706	65	497	10°0	9	-0°386	+48°155	64	487	9°4	20	-36°044	-10°753	65	500	9°3									
10	-2°380	-28°490				10	+45°777	-46°320				10	+0°352	+21°869	64	487	9°4	14	-36°757	-6°285	65	499	9°6									
22	-1°243	-5°404				11	+47°646	-3°575				15	+0°947	+18°183	64	487	9°4	20	-36°044	-10°753	65	500	9°3									
27	-0°323	-61°003				9	+47°673	-33°361				13	+2°654	+58°809	64	488	9°7	9	-30°981	-55°126	65	500	9°3									
	211		65	487	9°5	12	+50°086	-26°759	65	498	9°0	9	-30°284	-8°342	64	488	9°7	9	-30°981	-55°126	65	501	9°4									
12	-0°060	-16°813				13	+50°770	-20°931				10	+3°175	+53°458	64	489	9°4	9	-30°284	-8°342				64	489	9°4	9	-30°284	-8°342	65	502	9°4
10	+0°912	-21°024				20	+51°137	-30°549				14	+4°401	+18°060	64	489	9°4	14	-30°245	-60°606				66	454	9°6						
9	+1°589	-61°602				10	+51°565	-59°544				10	+5°747	+32°886	64	490	10°1	24	-28°703	-21°903				66	454	9°6						
9	+1°756	-25°535	65	488	9°6	9	+52°227	-14°666	65	499	10°1	10	+7°034	+46°216	64	490	10°1	9	-27°735	-31°493	65	502	9°4									
12	+1°775	-0°212				16	+52°707	-44°120				10	+7°452	+49°347	64	491	9°4	18	-26°555	-29°909				65	502	9°4						
11	+1°857	-61°160				10	+53°507	-34°844				17	+7°684	+59°341	64	491	9°4	9	-26°015	-9°311				65	503	9°4						
13	+2°704	-30°931				9	+54°695	-27°221				13	+7°876	+7°349	64	492	9°6	16	-20°379	-4°165				65	503	9°4						
13	+4°136	-23°752	65	489	9°7	10	+55°295	-46°090	65	500	10°1	10	+8°822	+1°865	64	492	9°6	34	-17°403	-11°965	65	504	8°6									
11	+4°603	-57°618				10	+57°257	-21°675				10	+9°176	+44°312	64	493	8°9	9	-15°373	-41°402	65	504	8°6									
11	+5°822	-21°553					281					41						9	-15°373	-41°402	65	504	8°6									
	221						281					41						101														
12	+6°440	-20°317	65	490	9°0	28	+58°923	-11°442	65	501	10°1	11	+9°386	+39°648	64	493	8°9	16	-14°878	-54°244	65	505	9°6									
10	+7°984	-25°174				13	+58°990	-23°493				10	+10°150	+16°485	64	494	10°1	12	-14°592	-54°662	65	506	10°0									
16	+8°282	-42°926				9	+59°150	-50°878				10	+10°889	+45°483	64	494	10°1	9	-12°984	-15°261	65	506	10°0									
13	+8°337	-51°116				16	+59°643	-43°326				27	+12°993	+19°065	64	493	8°9	9	-11°151	-50°270	65	507	7°9									
9	+8°692	-54°228	65	491	9°0	13	+59°827	-54°326	65	502	10°1	13	+17°683	+60°679	64	494	10°1	9	-7°296	-11°135	65	508	10°0									
16	+9°014	-56°620				48	+63°099	-47°737				46	+17°863	+30°348	64	495	6°7	11	-5°809	-43°973	65	507	7°9									
14	+9°031	-63°235				10	+64°838	-8°818				10	+10°803	+21°017	64	497	10°0	9	-5°577	-1°035	65	508	10°0									
12	+10°920	-35°686										12	+20°316	+58°759	64	496	10°0	45	-4°094	-17°227	65	508	10°0									
15	+11°695	-42°464	65	492	8°9	14	+21°212	+61°367	65	503	9°7	14	+21°212	+61°367	63	501	9°7	11	-2°270	-1°631	65	509	10°0									
10	+11°824	-27°087				10	+27°147	+32°269				10	+27°147	+32°269	63	501	9°7	11	-2°270	-1°631	65	509	10°0									

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					PLATE CENTRE.					51,					111,			
11	- 1°552	- 5°929				6h 9m, - 65°.				9	+ 2°834	+ 52°485			12	- 45°553	- 9°207	65 537 9°7	
12	- 1°180	- 30°811	65	510	10°0					17	+ 4°672	+ 41°462	64 522 9°3		22	- 45°262	- 21°166	65 536 8°5	
17	- 0°466	- 52°521	65	511	9°6					9	+ 8°139	+ 29°556			15	- 41°780	- 40°635	65 538 9°7	
14	- 0°128	- 57°367	65	512	9°6					11	+ 9°085	+ 7°846			16	- 40°383	- 49°977	65 539 9°1	
9	- 1°005	- 32°311								11	+ 9°883	+ 51°034			9	- 40°262	- 13°872		
10	+ 1°828	- 47°026								10	+ 10°329	+ 35°885			9	- 39°284	- 49°668		
9	+ 2°872	- 55°587								9	+ 11°087	+ 16°455			15	- 39°266	- 54°163	65 540 9°1	
12	+ 3°768	- 32°743	65	513	10°1					10	+ 12°080	+ 63°434			18	- 38°985	- 15°574	65 542 9°1	
9	+ 3°981	- 40°640								9	+ 13°511	+ 64°636			15	- 38°778	- 47°030	65 541 9°4	
28	+ 5°682	- 35°955	65	514	9°0					9	+ 13°595	+ 3°564			9	- 38°395	- 7°025		
12	+ 6°563	- 16°871	65	515	9°9	10	- 63°358	+ 31°842	64 509 9°9	9	+ 17°708	+ 43°146			10	- 38°166	- 1°458		
10	+ 7°205	- 7°104				28	- 61°591	+ 40°701	64 510 7°9	10	+ 18°134	+ 37°269			15	- 34°468	- 24°903	65 543 10°0	
20	+ 9°500	- 12°526	65	516	9°3	10	- 60°260	+ 49°231		10	+ 18°328	+ 52°559			10	- 31°998	- 4°546		
14	+ 10°459	- 38°940				10	- 59°807	+ 62°406	63 509 9°4	16	+ 20°102	+ 45°936	64 523 9°6		18	- 31°823	- 35°567	65 544 9°3	
10	+ 12°066	- 3°818				9	- 57°481	+ 13°345		9	+ 21°141	+ 6°486			10	- 31°823	- 43°168		
18	+ 12°363	- 35°452	65	517	9°3	12	- 54°384	+ 60°936	63 514 9°4	9	+ 22°848	+ 16°819			9	- 28°060	- 11°077		
20	+ 12°622	- 24°666	65	518	9°4	9	- 53°501	+ 56°384	64 511 10°1	9	+ 25°783	+ 6°466			12	- 26°909	- 30°730		
11	+ 13°140	- 60°187				9	- 52°052	+ 57°450		15	+ 29°156	+ 21°082	64 524 10°0		13	- 26°821	- 41°852	65 545 10°1	
11	+ 17°172	- 26°275				9	- 48°428	+ 37°004		11	+ 33°085	+ 34°830			9	- 26°762	- 38°331		
10	+ 17°829	- 55°721				33	- 48°157	+ 8°131	64 512 7°6	22	+ 35°933	+ 39°553	64 525 8°0		9	- 26°421	- 37°313		
14	+ 18°152	- 47°294				15	- 48°024	+ 58°327	64 513 9°4	10	+ 37°814	+ 32°990			10	- 24°944	- 41°397		
14	+ 20°107	- 19°845	65	519	9°7	9	- 41°695	+ 23°954		11	+ 38°049	+ 19°117			10	- 24°923	- 51°090		
9	+ 21°699	- 14°578				9	- 40°923	+ 23°400		9	+ 40°370	+ 57°608			28	- 24°853	- 50°922	65 546 8°7	
11	+ 22°008	- 4°213				9	- 40°761	+ 33°252		11	+ 41°142	+ 23°273			15	- 23°449	- 52°218	65 547 9°4	
15	+ 22°385	- 56°417	65	521	9°6	14	- 40°318	+ 3°708	64 514 9°8	9	+ 42°690	+ 17°405			15	- 23°074	- 44°165	65 548 10°0	
18	+ 22°513	- 8°893	65	520	9°6	9	- 37°007	+ 11°147		12	+ 42°867	+ 14°945			12	- 22°325	- 33°705		
17	+ 23°125	- 58°687	65	522	9°4	9	- 36°655	+ 6°171		9	+ 43°714	+ 0°737			10	- 22°223	- 12°919		
44	+ 23°574	- 54°577	65	523	7°8	9	- 36°567	+ 5°512		9	+ 45°322	+ 25°487			19	- 20°936	- 17°927	65 549 8°5	
27	+ 23°675	- 59°227	65	524	8°5	9	- 28°206	+ 25°450		9	+ 47°301	+ 6°488			12	- 19°950	- 54°098	65 550 10°1	
9	+ 25°404	- 12°240				9	- 25°923	+ 51°762		11	+ 48°063	+ 8°296			19	- 18°749	- 32°503	65 551 9°1	
9	+ 26°292	- 51°003				10	- 25°359	+ 0°804		15	+ 51°193	+ 43°906	64 526 9°7		48	- 18°283	- 62°338	66 493 5°7	
22	+ 31°049	- 1°525	65	525	9°1	9	- 25°207	+ 0°697		9	+ 52°299	+ 22°378			10	- 16°581	- 51°088		
9	+ 31°190	- 54°423				9	- 23°084	+ 25°220		15	+ 52°369	+ 54°329	64 527 9°6		12	- 16°481	- 64°956	66 494 9°7	
10	+ 32°123	- 5°664				12	- 22°846	+ 37°242		11	+ 52°818	+ 15°751			10	- 15°141	- 34°363		
10	+ 32°669	- 58°665				9	- 22°618	+ 6°076		28	+ 52°915	+ 25°815	64 528 8°2		9	- 14°898	- 48°031		
9	+ 33°335	- 32°473				9	- 21°516	+ 14°328		15	+ 53°085	+ 31°926			14	- 14°574	- 48°047	65 552 9°7	
10	+ 33°911	- 22°946				10	- 20°098	+ 13°730		11	+ 53°091	+ 2°110			9	- 12°656	- 36°687		
14	+ 34°232	- 17°706				12	- 18°766	+ 27°204		9	+ 53°591	+ 47°709			10	- 11°720	- 37°249		
9	+ 36°570	- 34°497				9	- 18°600	+ 44°202		34	+ 54°986	+ 60°564	63 541 6°9		10	- 9°955	- 17°121		
9	+ 37°438	- 14°805				15	- 17°786	+ 1°305		9	+ 55°792	+ 8°239			9	- 9°685	- 38°903		
13	+ 37°883	- 40°778	65	527	10°1	15	- 16°542	+ 5°996	64 515 10°0	9	+ 59°658	+ 41°759			20	- 9°147	- 15°754	65 553 8°8	
14	+ 38°278	- 45°264				18	- 15°051	+ 38°096	64 516 8°9	19	+ 60°453	+ 14°364	64 530 8°8		16	- 6°931	- 60°773	65 554 9°4	
26	+ 38°538	- 18°270	65	526	9°0	16	- 14°409	+ 36°279	64 517 10°0	15	+ 60°780	+ 28°869	64 529 9°4		11	- 6°684	- 56°199		
26	+ 41°688	- 24°509	65	528	8°9	15	- 14°382	+ 27°664	64 518 9°6	11	+ 61°280	+ 6°894	64 531 9°6		9	- 4°097	- 63°641		
9	+ 42°299	- 53°689				15	- 14°012	+ 58°193	64 519 9°6	11	+ 63°760	+ 11°916	64 532 9°7		28	- 1°930	- 3°925	65 555 8°8	
12	+ 42°739	- 14°792				9	- 11°799	+ 45°961		10	+ 64°092	+ 4°535	64 533 10°0		12	- 0°591	- 41°775		
9	+ 47°981	- 11°960				21	- 10°924	+ 34°918	64 520 8°8	9	- 63°971	- 45°639			12	+ 0°266	- 17°341		
12	+ 48°290	- 45°058				15	- 7°309	+ 54°502	64 521 9°7	11	- 63°686	- 17°712	65 529 10°0		15	+ 1°043	- 39°876	65 556 9°6	
14	+ 50°518	- 17°223	65	529	10°0	9	- 6°478	+ 2°640		19	- 62°880	- 25°147	65 530 9°0		9	+ 2°982	- 52°625		
26	+ 50°809	- 24°696	65	530	9°0	10	- 6°435	+ 36°186		9	- 61°078	- 42°451			12	+ 3°701	- 26°388		
												</							

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.			
	171,				PLATE CENTRE. 6h 27m, - 65°. Plate 617. 1893, Feb. 16. PROVISIONAL CONSTANTS. a = - .01159 d = + .00038 b = - .00021 e = - .01134 c = - .2359 f = + .0103 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51,				111,					
9	+14.730	-53.473								16	-16.946	+17.502	64 554	9.6	15	+20.574	+1.623	64 575	10.0
14	+15.999	-1.294	65 563	9.9						20	-16.072	+8.944	64 555	9.1	12	+20.751	+43.000		
11	+16.205	-39.709								11	-16.064	+28.933			12	+21.985	+27.074		
20	+16.515	-31.633	65 564	9.0						10	-16.058	+25.205			17	+22.090	+59.907	63 587	9.5
42	+18.518	-30.804	65 565	7.3						16	-15.608	+18.515	64 556	9.7	12	+23.115	+42.123		
32	+18.832	-30.972	65 566	8.5						16	-15.463	+60.910	63 574	9.6	20	+23.826	+30.082	64 576	9.2
16	+19.302	-44.485	65 567	9.9						15	-14.777	+48.231	64 557	9.5	15	+24.734	+10.400	64 577	9.5
15	+20.819	-44.387	65 568	10.0						13	-13.675	+40.825	64 558	10.0	20	+27.774	+21.980	64 578	9.1
11	+21.817	-8.170								11	-11.980	+48.111			16	+27.790	+13.701	64 579	9.8
10	+22.553	-56.935								12	-11.820	+14.572			14	+28.622	+40.351	64 580	9.8
	181										61					121			
17	+23.426	-47.690	65 569	9.0	44	-64.573	+60.211	63 541	6.9	10	-11.690	+60.894			19	+28.820	+32.021	64 581	9.3
15	+23.724	-45.043			15	-64.410	+31.502			11	-11.608	+60.470			18	+33.738	+60.808	63 598	9.3
15	+24.775	-61.785	66 502	9.4	24	-64.158	+25.394	64 528	8.2	14	-11.600	+11.608			14	+34.080	+27.296		
9	+25.682	-25.627			14	-62.281	+1.756			9	-11.581	+30.346			10	+34.620	+47.616		
9	+26.480	-10.395			10	-61.629	+51.449			16	-11.503	+46.383	64 559	9.5	13	+35.693	+11.714		
18	+26.758	-27.575	65 570	9.0	11	-60.027	+8.061			14	-10.340	+44.909	64 560	9.6	11	+36.066	+30.544		
13	+26.987	-7.751			10	-58.912	+4.180			15	-9.629	+33.570			12	+36.367	+21.902		
10	+28.764	-3.667			12	-58.553	+41.768			24	-9.340	+44.439	64 561	8.6	11	+37.607	+34.295		
11	+29.502	-9.983			18	-56.523	+28.995	64 529	9.4	10	-8.908	+49.360			16	+38.553	+3.873	64 582	10.0
20	+29.526	-30.164	65 571	8.8	22	-55.818	+14.497	64 530	8.8	20	-8.381	+30.920	64 562	8.8	14	+39.601	+27.940		
	191					11					71					131			
10	+30.256	-35.572			10	-55.750	+26.357			11	-8.292	+58.645			10	+39.633	+8.879		
17	+30.725	-43.502	65 572	9.1	16	-54.463	+7.100	64 531	9.6	10	-7.434	+1.022			13	+40.635	+1.078		
10	+31.670	-30.270			11	-52.421	+2.712			9	-7.170	+56.549			16	+40.771	+40.310	64 583	9.5
10	+31.876	-37.370			16	-52.347	+12.300	64 532	9.7	11	-6.403	+4.947			11	+42.283	+28.433		
9	+34.798	-29.695			14	-51.492	+4.962	64 533	10.0	14	-4.920	+51.006			14	+43.495	+35.995	64 584	9.8
11	+37.013	-41.593			10	-45.811	+25.697			11	-4.516	+1.950			10	+44.050	+46.338		
14	+41.479	-5.468			14	-45.353	+11.299	64 534	10.0	12	-4.275	+34.796			10	+44.607	+32.515		
10	+42.147	-31.516			13	-43.467	+7.104			20	-4.060	+36.584	64 563	9.1	19	+44.655	+37.549	64 585	9.2
11	+44.775	-24.425			26	-43.423	+59.786	63 555	8.5	9	-3.893	+56.706			11	+45.357	+48.372		
11	+45.475	-36.066			11	-43.272	+29.460			16	-3.830	+9.820	64 564	9.7	11	+46.655	+17.055		
	201					21					81					141			
11	+45.505	-53.893			18	-42.136	+19.437	64 535	9.4	14	-3.826	+36.542			18	+46.968	+12.087	64 586	9.1
10	+47.227	-23.821			18	-40.385	+0.838	64 536	9.5	14	-3.798	+2.218			12	+47.036	+12.132		
12	+48.189	-62.897	66 511	9.6	14	-39.847	+27.465	64 537	10.0	11	-0.216	+20.225			9	+47.303	+49.417		
14	+49.119	-53.573			16	-35.843	+14.473	64 539	9.4	12	-0.027	+34.418			18	+47.349	+6.026	64 587	9.2
12	+49.589	-26.351			10	-34.728	+8.374			10	-0.018	+5.950			24	+48.025	+3.357		
12	+51.450	-48.674	65 573	9.7	15	-34.377	+39.266	64 540	10.0	14	+0.218	+47.523	64 565	9.8	9	+49.850	+3.575		
12	+52.020	-62.557	66 513	9.7	17	-33.196	+37.043	64 541	9.6	10	+0.552	+22.492			11	+51.050	+39.472		
20	+60.770	-5.232	65 574	9.0	11	-33.182	+62.312			9	+0.568	+0.524			24	+54.994	+11.441	64 589	8.2
12	+61.755	-3.357	65 575	10.0	16	-32.373	+60.758	63 559	9.4	11	+1.104	+33.632			15	+55.899	+32.056	64 590	9.4
24	+63.326	-62.547	66 516	8.4	10	-32.026	+0.268			12	+1.986	+38.164			10	+57.113	+46.540		
						31					91					151			
					16	-31.805	+7.531	64 542	10.0	19	+2.648	+57.791	64 566	9.2	12	+59.243	+25.890	64 591	10.0
					15	-31.088	+1.053	64 543	10.0	16	+2.933	+55.679	64 567	9.6	21	+59.333	+22.542	64 592	8.7
					16	-30.501	+37.580	64 544	9.5	18	+4.924	+20.936	64 568	9.3	10	+60.058	+4.508		
					12	-30.090	+10.213			14	+6.946	+41.840			10	+60.614	+27.007		
					14	-30.032	+3.977	64 545	10.0	9	+7.777	+52.473			19	+63.627	+1.531	64 595	9.1
					15	-29.916	+15.871	64 546	9.6	14	+7.997	+8.576	64 569	10.0	14	+64.268	+24.512	64 594	9.4
					28	-29.810	+30.601	64 547	8.5	10	+8.061	+28.634			15	-63.752	-26.878		
					12	-29.333	+53.676			16	+9.667	+46.095	64 570	9.8	18	-62.559	-63.431	66 511	9.6
					11	-29.093	+12.672			12	+10.624	+36.199			17	-62.303	-54.060		
					18	-28.382	+30.371	64 548	9.2	24	+10.989	+50.474	64 571	8.4	15	-60.333	-48.979		
						41					101					161			
					14	-28.293	+45.916	64 549	9.8	9	+11.071	+16.705			15	-60.306	-49.041		
					12	-26.801	+19.917			12	+13.225	+22.594			10	-58.932	-57.003		
					10	-24.299	+43.141			12	+13.452	+20.956			18	-58.772	-62.820	66 513	9.7
					14	-23.626	+25.466	64 550	10.0	9	+13.679	+20.101			9	-58.561	-7.972		
					10	-23.471	+59.351			18	+13.851	+54.341	64 572	9.6	12	-57.447	-23.803		
					18	-22.373	+1.077	64 551	9.3	16	+14.825	+18.249	64 573	9.6	11	-57.426	-40.741		
					9	-21.726	+33.231			13	+16.928	+47.477			10	-57.104	-3.317		
					13	-19.744	+33.773	64 552	10.0	10	+18.414	+2.110			22	-54.118	-5.026	65 574	9.0
					15	-19.445	+33.584	64 553	9.8	15	+19.317	+45.769	64 574	10.0	11	-53.271	-3.080	65 575	10.0
					13	-19.253	+60.675	63 571	10.0	14									

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,							PLATE CENTRE.	
																		6h 45m, - 65°.	
																		Plate 157. 1892, Feb. 4.	
																		PROVISIONAL CONSTANTS.	
																		a = - '01163	d = - '00108
																		b = + '00091	e = - '01139
																		c = - '0619	f = + '0205
																		To obtain standard co-ordinates, ξ, η	
																		$\xi = x + ax + by + c$	
																		$\eta = y + dx + ey + f$	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
9	-38°783	+38°408			9	-14°605	+0°204			11	+6°370	+28°670			16	+39°511	+13°222		
9	-38°072	+15°326			12	-14°575	+27°988			9	+6°936	+22°778			9	+39°756	+33°661		
9	-37°838	+37°908			9	-14°550	+30°182			9	+7°307	+20°213			12	+41°007	+20°852		
9	-36°466	+21°780			9	-14°268	+52°590			14	+7°825	+57°713			14	+41°295	+41°698		
10	-36°162	+30°424			9	-13°380	+15°007			10	+9°751	+56°490			11	+41°432	+0°543		
9	-35°906	+31°104			9	-13°065	+4°860			19	+11°311	+47°185	64 622	9°3	9	+41°456	+22°726		
11	-35°574	+43°860			9	-12°955	+54°930			11	+11°597	+13°821			10	+41°544	+12°825		
12	-35°460	+19°092			10	-12°954	+11°673			35	+11°741	+1°484	64 623	8°8	9	+42°218	+38°717		
9	-35°381	+60°513			12	-12°331	+64°509			12	+12°864	+1°269			9	+42°234	+1°604		
11	-35°157	+9°982			11	-12°213	+42°571			10	+12°960	+7°600			12	+42°245	+16°376		
	61					121					181					241			
9	-34°814	+35°194			19	-11°964	+19°549	64 613	9°5	11	+13°073	+48°772			13	+42°549	+56°045		
13	-34°613	+7°868			11	-11°936	+39°785			13	+13°601	+56°164			9	+42°770	+33°358		
9	-34°525	+10°739			9	-11°734	+11°470			12	+15°383	+59°846			13	+43°705	+28°269		
10	-33°914	+49°711			15	-11°546	+51°472	64 614	10°0	9	+15°419	+49°951			12	+43°942	+29°390		
11	-32°846	+45°918			9	-11°110	+57°839			9	+16°922	+37°151			10	+44°010	+36°118		
9	-32°511	+61°710			12	-11°050	+4°285			9	+17°187	+55°861			10	+44°216	+25°214		
15	-30°777	+10°621			10	-10°897	+33°736			9	+17°644	+6°130			22	+44°570	+1°240	64 628	9°3
22	-29°511	+11°818	64 602	9°5	11	-10°796	+25°256			9	+19°253	+26°078			9	+44°604	+52°656		
18	-28°432	+6°762	64 603	9°8	9	-10°376	+35°636			9	+19°644	+50°580			17	+45°378	+53°311	64 627	9°6
32	-28°352	+44°640	64 604	8°4	12	-9°892	+58°391			9	+19°654	+61°014			30	+46°712	+24°776	64 629	9°2
	71					131					191					251			
9	-28°274	+32°164			10	-9°826	+31°953			10	+20°417	+51°006			9	+46°936	+27°718		
9	-27°741	+30°250			11	-8°744	+4°531			12	+21°010	+60°115			9	+47°228	+28°632		
13	-27°616	+52°501			11	-8°720	+44°112			14	+21°275	+8°723			15	+47°250	+26°712		
9	-27°419	+16°721			12	-8°580	+42°246			9	+22°786	+34°649			10	+47°355	+16°591		
10	-27°208	+20°741			9	-8°230	+10°002			12	+22°863	+51°714			15	+48°720	+52°753	64 630	9°8
9	-26°154	+54°422			9	-8°078	+55°253			11	+24°335	+4°733			9	+49°412	+23°385		
12	-25°790	+20°734			9	-7°938	+30°418			12	+24°559	+18°814			9	+49°990	+22°475		
11	-25°546	+33°766			21	-7°359	+27°992	64 615	9°3	10	+24°581	+50°950			9	+50°272	+16°169		
9	-25°358	+20°819			9	-7°337	+47°502			9	+24°709	+16°522			18	+50°294	+64°759	63 644	9°2
38	-25°165	+28°968	64 605	8°4	17	-7°249	+27°802			9	+24°902	+29°807			17	+50°851	+22°385		
	81					141					201					261			
17	-24°771	+12°745	64 606	10°0	9	-7°060	+44°273			12	+25°687	+48°250			10	+51°479	+57°368		
12	-24°674	+25°379			9	-6°439	+31°748			9	+25°801	+27°776			9	+53°267	+60°697		
9	-24°670	+62°684			12	-6°378	+30°436			9	+26°101	+60°677			21	+54°990	+29°990	64 631	9°2
14	-24°035	+24°306			9	-5°377	+56°575			9	+27°182	+32°669			9	+56°002	+7°450		
15	-23°964	+1°673			28	-5°375	+27°510	64 616	8°8	10	+27°285	+42°919			13	+56°135	+36°703		
13	-23°729	+36°461			11	-5°246	+56°907			10	+27°807	+49°595			14	+57°253	+36°989	64 632	10°0
18	-23°390	+33°442	64 607	9°8	10	-4°854	+49°105			15	+28°101	+27°474			11	+58°553	+13°816		
10	-23°147	+17°317			9	-4°516	+41°915			11	+28°678	+18°811			9	+59°350	+9°398		
9	-22°695	+17°309			9	-4°462	+5°744			14	+29°457	+45°934	64 624	10°0	9	+59°600	+8°943		
17	-22°400	+34°772			10	-3°008	+13°533			10	+30°975	+42°450			11	+60°445	+55°935		
	91					151					211					271			
36	-22°307	+34°822	64 608	8°2	14	-2°864	+58°600			9	+31°771	+56°563			14	+61°961	+14°845		
9	-21°873	+8°770			10	-1°977	+62°413			9	+33°353	+59°685			9	+62°181	+6°741		
18	-21°821	+7°259	64 609	9°8	10	-1°468	+21°481			11	+33°583	+28°521			16	+63°111	+9°047		
13	-21°301	+34°985			11	-1°042	+9°430			14	+33°995	+30°686	64 625	10°0	15	+63°391	+28°674	64 633	10°0
9	-20°931	+62°221			9	-1°034	+15°887			17	+34°198	+12°492			11	-63°534	-50°823	65 623	9°8
24	-20°771	+4°194	64 610	9°3	13	-0°896	+0°022			9	+34°347	+25°461			11	-62°194	-17°687		
9	-20°235	+21°180			10	-0°864	+8°194			9	+34°572	+21°714			11	-62°049	-4°143		
18	-20°021	+14°116	64 611	9°5	18	-0°856	+49°138	64 617	9°8	11	+35°198	+30°329			9	-61°273	-61°299	65 624	10°0
9	-20°021	+10°590			10	-0°630	+53°429			9	+35°273	+44°096			11	-61°184	-39°555	65 625	10°0
9	-19°777	+42°022			12	-0°440	+32°495			11	+35°467	+40°760			10	-58°885	-0°489		
	101					161					221					281			
9	-19°211	+38°574			40	-0°040	+3°924	64 618	8°4	9	+35°641	+35°764			11	-57°856	-13°833		
9	-18°684	+2°530			9	+0°177	+19°311			9	+35°668	+42°304			10	-57°568	-40°284		
9	-18°565	+1°054			18	+0°260	+50°826	64 619	9°5	11	+35°765	+17°560			12	-56°499	-14°485		
10	-18°313	+22°727			18	+0°410	+15°027	64 620	9°5	13	+36°569	+5°617			9	-56°445	-12°595		
9	-18°306	+60°130			9	+1°371	+7°726			11	+37°041	+28°610			11	-54°588	-0°230		
10	-17°881	+4°243			16	+2°510	+46°852	64 621	10°0	17	+37°259	+50°281	64 626	9°6	9	-53°996	-26°227		
9	-17°267	+34°183			10	+2°596	+12°740			10	+37°426	+18°941			10	-52°493	-55°781	65 626	10°0
12	-17°227	+21°531			9	+2°623	+53°211			15	+38°144	+22°537			10	-51°655	-0°376		
11	-15°641	+44°944			11	+3°134	+17°023			10	+38°539	+9°156			9	-51°577	-43°562		
9	-15°157	+44°769			10	+6°142	+27°210			9	+38°978	+44°345			13	-49°099	-12°969		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.				
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.			
	291,					351,					411,					471,						
14	-48°077	-16°654			42	-24°140	-22°495	65	644	7°9	14	-1°766	-48°550			15	+23°475	-60°546	65	659	9°5	
11	-47°657	-1°364			22	-24°102	-53°749	65	643	8°8	10	-1°390	-46°832			9	+24°760	-36°763				
9	-47°653	-0°062			9	-23°988	-4°251				10	-1°125	-19°795			10	+25°094	-30°894				
10	-45°713	-30°463			9	-23°927	-37°962				9	-0°994	-33°684			9	+25°767	-59°311				
12	-45°685	-56°386	65	627	10°0	11	-22°946	-3°179			12	-0°250	-50°113			16	+26°245	-16°375	65	660	10°0	
9	-45°525	-29°621			11	-22°486	-19°920				12	+0°046	-38°444			11	+26°327	-25°092				
10	-45°162	-8°228			11	-22°253	-4°417				9	+0°266	-56°560			19	+26°903	-4°136	65	661	9°1	
18	-44°896	-20°285	65	628	9°2	16	-22°126	-22°497	65	645	9°6	10	+0°570	-26°882			12	+26°929	-14°618			
10	-44°400	-20°579			10	-21°634	-22°811				11	+2°918	-37°153			9	+27°327	-24°182				
15	-44°375	-32°126	65	629	10°0	11	-21°399	-30°502			12	+3°198	-60°750			9	+27°985	-36°606				
	301					361						421				481						
11	-43°735	-29°056			9	-21°020	-21°975				10	+3°685	-44°266			9	+28°037	-12°300				
9	-43°232	-38°242			9	-20°233	-4°147				11	+4°299	-26°777			11	+28°045	-41°941				
11	-43°092	-21°913			9	-20°135	-60°416				11	+4°926	-14°510			10	+28°869	-6°877				
12	-42°467	-1°996			9	-19°993	-42°264				10	+5°034	-25°032			10	+29°331	-15°930				
9	-42°449	-61°708			16	-19°739	-2°119	65	646	9°6	11	+5°394	-57°999			10	+29°602	-30°855				
14	-42°430	-51°238	65	630	9°4	9	-19°577	-25°361			9	+5°601	-31°997			10	+31°763	-13°146				
34	-41°572	-60°950	65	631	8°0	14	-19°325	-9°707			9	+6°453	-15°881			11	+33°434	-53°189				
15	-41°406	-14°171	65	632	10°0	10	-19°214	-7°499			11	+6°454	-54°777			9	+34°337	-14°224				
9	-41°315	-14°161			9	-19°189	-9°506				11	+7°186	-0°418			11	+34°684	-58°465				
12	-40°921	-3°070			9	-19°051	-34°635				16	+7°304	-15°079	65	653	10°0	15	+34°753	-0°423			
	311					371						431				491						
10	-39°933	-40°154			24	-18°619	-60°500	65	647	8°7	11	+7°492	-37°290			10	+35°667	-26°502				
9	-39°294	-9°186			11	-18°117	-39°390				12	+7°584	-23°166			11	+35°887	-16°979				
16	-39°048	-54°210	65	633	9°3	9	-18°098	-13°005			11	+7°686	-34°378			11	+36°645	-41°096				
9	-38°987	-0°347			34	-17°854	-39°022	65	648	8°2	10	+8°479	-36°461			9	+37°325	-31°570				
11	-38°020	-31°508			9	-17°471	-41°042				15	+8°671	-15°688	65	654	10°0	12	+37°656	-24°303			
9	-37°138	-43°524			10	-17°191	-12°017				9	+8°824	-10°755			15	+38°036	-37°677	65	662	9°3	
13	-36°964	-35°550	65	634	10°0	9	-16°991	-20°632			10	+9°145	-18°095			10	+38°081	-23°689				
11	-36°698	-33°955			11	-16°784	-10°241				15	+9°144	-31°321	65	655	10°0	9	+38°829	-23°546			
15	-36°467	-11°594	65	635	9°4	9	-15°939	-30°800			10	+10°433	-23°437			15	+39°544	-22°691				
10	-36°437	-40°845			9	-15°725	-30°192				14	+10°945	-13°683			15	+39°972	-22°539				
	321					381						441				501						
40	-36°068	-11°346	65	636	8°1	9	-15°438	-30°842			10	+11°419	-9°278			10	+40°113	-31°068				
11	-35°935	-47°967			9	-15°161	-55°095				11	+11°815	-1°380			11	+40°721	-5°732				
10	-35°222	-13°755			11	-13°898	-15°543				10	+11°960	-30°582			13	+40°823	-6°397				
9	-34°860	-11°403			18	-12°178	-0°854	64	612	9°3	25	+12°537	-27°949	65	656	9°1	37	+40°826	-30°578	65	663	8°0
15	-34°816	-15°390	65	637	10°0	13	-12°178	-33°490			11	+12°816	-0°092			11	+43°323	-24°429				
15	-32°559	-32°952	65	638	9°7	10	-11°844	-39°590			11	+13°393	-36°678			14	+43°497	-27°909				
9	-32°492	-32°185			14	-11°766	-21°568				13	+14°007	-44°214			28	+44°047	-8°678	65	664	8°7	
10	-32°195	-15°488			9	-11°586	-3°280				17	+14°040	-37°829	65	657	9°5	16	+44°219	-18°846	65	665	10°0
12	-31°880	-3°240			9	-10°678	-61°342				9	+14°463	-12°086			9	+44°743	-25°065				
11	-31°594	-2°524			9	-10°360	-45°446				11	+14°482	-7°268			10	+44°805	-20°516				
	331					391						451				511						
18	-31°411	-51°326	65	639	9°2	11	-9°990	-23°232			11	+14°502	-24°815			12	+45°913	-28°569				
9	-30°915	-2°612			9	-9°848	-23°756				10	+14°993	-51°089			39	+47°720	-18°720	65	666	8°3	
11	-30°896	-20°287			12	-9°610	-3°289				9	+15°449	-9°884			10	+47°835	-33°147				
13	-30°690	-3°116			12	-8°832	-14°322				10	+16°333	-33°833			11	+47°910	-28°315				
12	-30°476	-14°448	65	641	10°0	9	-7°710	-23°123			10	+16°589	-6°252			9	+47°924	-36°011				
14	-30°366	-14°741	65	642	10°0	9	-7°552	-54°299			11	+17°479	-30°703			14	+48°210	-36°000	65	667	10°0	
14	-30°296	-59°330	65	640	9°6	10	-7°337	-7°092			12	+17°567	-2°832			11	+49°002	-55°313				
12	-30°282	-5°527			9	-6°807	-52°455				11	+18°807	-45°576			14	+49°054	-35°592				
10	-29°728	-59°975			9	-6°010	-26°149				9	+19°185	-55°239			11	+49°172	-18°601				
10	-29°086	-34°569			12	-5°872	-33°140				10	+19°388	-20°553			30	+49°863	-45°185	65	669	8°7	
	341					401						461				521						
9	-28°888	-3°078			10	-5°422	-25°100				9	+20°011	-16°409			11	+50°187	-1°411				
11	-28°126	-13°519			9	-5°370	-13°694				18	+20°219	-56°985			9	+50°459	-1°291				
12	-27°906	-35°638			17	-5°296	-10°491	65	649	9°6	11	+20°398	-13°471			15	+50°851	-14°061	65	668	10°0	
9	-27°031	-43°488			11	-5°260	-12°475				9	+20°598	-55°376			9	+50°908	-60°623				
9	-26°738	-18°120			20	-5°072	-28°420	65	650	9°2	11	+21°143	-44°062			10	+52°207	-48°546				
11	-25°260	-27°791			11	-4°845	-39°506				10	+21°189	-18°687			10	+52°363	-38°871				
10	-25°002	-57°639			15	-4°573	-61°659	65	651	9°4	15	+22°025	-16°353			17	+52°701	-48°514	65	670	9°0	
9	-25°000	-4°065			15	-2°860	-12°704	65	652	10°0	11	+22°543	-6°360			9	+53°159	-1°440				
11	-24°863	-33°723			9	-2°702	-32°486															

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
	531,					PLATE CENTRE. 7^h 3^m, - 65°. Plate 139. 1892, Jan. 30. PROVISIONAL CONSTANTS. $a = -0.01166$ $d = -0.00067$ $b = +0.00063$ $e = -0.01168$ $c = +0.1203$ $f = +0.2726$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$								
9	+54.913	-40.986												
10	+55.359	-15.632												
10	+55.983	-50.335												
9	+58.331	-47.994												
9	+58.769	-33.223												
11	+58.804	-35.237												
15	+59.447	-16.887	05	671	10.0									
12	+60.524	-5.690												
19	+01.229	-14.351	05	672	9.2									
10	+61.317	-8.355												
9	541													
9	+62.749	-11.177												
11	+63.096	-27.620												
36	+63.948	-50.789	65	673	8.2									
10	+64.629	-44.586												
						15	-62.832	+29.370	64	631	9.2			
						12	-62.152	+36.132						
						13	-61.052	+36.493	64	632	10.0			
						9	-60.182	+6.948						
						11	-59.210	+55.581						
						11	-58.113	+13.476						
						10	-55.009	+63.271						
						14	-54.795	+14.759						
						14	-54.355	+28.640	64	633	10.0			
						10	-53.991	+6.682						
						18	-53.691	+46.382	64	634	9.2			
						16	-53.236	+9.060						
						9	-52.154	+41.194						
						16	-51.565	+45.252	64	636	9.5			
						14	-51.565	+37.510	64	635	9.5			
						9	-51.011	+21.284						
						9	-50.044	+14.026						
						20	-49.205	+7.243	64	637	8.8			
						14	-49.186	+19.974						
						9	-48.253	+30.226						
						21								
						12	-47.822	+33.349						
						11	-47.751	+33.027						
						10	-47.607	+33.342						
						11	-47.137	+15.896						
						10	-47.107	+33.218						
						10	-47.072	+12.477						
						9	-47.046	+15.810						
						12	-46.371	+37.870						
						13	-46.017	+19.268						
						23	-45.981	+33.021	64	638	8.8			
						31								
						10	-45.023	+46.182						
						12	-44.662	+33.202						
						13	-44.219	+52.768						
						10	-42.632	+9.646						
						10	-42.568	+35.168						
						10	-42.556	+46.271						
						11	-41.646	+47.144						
						12	-41.306	+50.140						
						17	-40.935	+10.536	64	639	9.5			
						9	-40.291	+26.730						
						41								
						10	-39.960	+15.295						
						13	-39.331	+26.318						
						10	-39.258	+7.058						
						13	-38.419	+34.580						
						17	-38.192	+32.357	64	641	9.6			
						12	-38.033	+19.884						
						19	-37.151	+16.705	64	642	9.0			
						11	-37.011	+14.402						
						14	-36.859	+14.804						
						16	-35.825	+14.426	64	643	10.0			
						14	-35.566	+23.616						
						12	-35.451	+36.588						
						10	-35.348	+12.841						
						19	-35.176	+47.512	64	644	9.1			
						12	-34.882	+34.771						
						11	-34.612	+27.990						
						9	-33.594	+2.844						
						10	-31.238	+15.445						
						18	-31.048	+21.046	64	645	9.3			
						10	-30.240	+25.707						
						16	-29.875	+19.871						
						19	-28.622	+26.692	64	646	9.0			
						11	-27.735	+37.597						
						11	-26.426	+28.333						
						17	-26.266	+44.395	64	647	9.6			
						15	-25.826	+21.949						
						9	-24.961	+61.558						
						10	-24.865	+17.695						
						18	-24.267	+19.643	64	648	9.4			
						12	-23.974	+26.503						
						71								
						11	-23.809	+27.676						
						12	-23.251	+53.914						
						9	-23.155	+15.663						
						9	-22.282	+2.736						
						18	-22.133	+24.239	64	649	9.3			
						11	-21.613	+54.913						
						10	-20.980	+58.928						
						15	-20.835	+34.326	64	650	9.5			
						10	-20.831	+17.795						
						10	-20.597	+8.690						
						81								
						12	-20.561	+8.250						
						10	-20.528	+0.881						
						9	-20.490	+31.038						
						11	-20.433	+44.788						
						13	-20.267	+46.158	64	651	9.6			
						11								

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
13	+17°561	+13°471			9	+51°227	+59°462			17	-44°520	-43°406	65° 675	10°0	13	-9°438	-28°176		
10	+18°233	+48°008			14	+51°247	+9°389			9	-43°640	-13°663			11	-8°786	-38°780		
13	+18°291	+46°126			12	+53°015	+19°636			24	-43°025	-45°570	65 676	9°4	15	-8°411	-46°980	65 689	9°7
10	+18°669	+3°374			9	+53°519	+0°712			9	-40°851	-1°550			18	-8°236	-25°274	65 690	9°2
15	+19°957	+50°666	64	666	10	+54°626	+28°370			11	-40°823	-21°373			11	-6°974	-1°808		
3	+19°978	+40°338			10	+54°705	+46°520			19	-40°712	-0°542	64 640	8°9	9	-6°460	-25°810		
9	+21°061	+21°810			10	+55°489	+25°712			20	-40°822	-35°910	65 677	9°3	13	-6°455	-17°489		
19	+21°240	+14°862	64	667	24	+57°473	+29°674	64 682	8°9	10	-39°920	-30°977			14	-6°374	-27°870	65 691	9°7
9	+21°563	+33°350			9	+57°552	+6°268			9	-39°705	-57°790			11	-6°348	-35°296		
20	+21°782	+25°673	64	668	15	+58°549	+8°911	64 684	9°4	9	-39°698	-8°099			13	-5°970	-24°446		
	181					241					301					361			
10	+22°517	+50°653			15	+59°231	+26°650	64 683	9°4	10	-38°967	-28°505			9	-5°968	-26°538		
11	+22°767	+32°081			12	+59°294	+2°041			22	-37°868	-54°710	65 678	9°6	9	-5°839	-64°404		
10	+23°128	+14°183			9	+60°745	+26°940			9	-37°798	-30°050			13	-5°576	-2°966		
16	+24°067	+4°215	64	669	42	+62°382	+16°809	64 686	7°3	12	-37°180	-9°906			11	-5°328	-3°381		
15	+25°812	+23°627			10	+62°439	+15°681			10	-36°416	-20°312			11	-5°289	-39°817		
15	+26°302	+44°084	64	670	14	+62°934	+51°106	64 685	9°7	17	-35°971	-61°942			12	-5°262	-26°024		
12	+29°892	+28°605			10	+63°415	+7°220			9	-35°570	-2°500			10	-4°893	-15°125		
11	+30°427	+7°318	64	671	10	+63°915	+55°008			16	-34°513	-43°479			9	-4°876	-10°839		
12	+30°915	+9°013			9	+64°005	+13°719			9	-33°938	-62°038			9	-4°502	-61°873		
10	+31°258	+9°591			10	+64°489	+7°636			11	-33°430	-10°495			17	-4°451	-26°512	65 692	9°2
	191					251					311					371			
10	+31°691	+5°549			9	+64°985	+23°461			9	-33°241	-38°710			9	-2°736	-46°356		
13	+31°932	+24°979			16	-64°905	-36°951	65 667	10°0	9	-33°183	-38°248			11	-2°606	-18°473		
9	+32°018	+16°109			14	-64°101	-36°483			14	-31°803	-51°346			9	-1°712	-27°277		
11	+32°278	+55°857	64	672	18	-63°825	-14°911	65 668	10°0	10	-31°350	-3°920			9	-1°544	-0°238		
10	+32°391	+55°861			9	-62°739	-56°146			16	-31°287	-39°746	65 679	9°7	11	-1°336	-11°042		
11	+32°541	+6°803			48	-62°605	-45°987	65 669	8°7	10	-30°814	-1°966			9	-1°180	-13°356		
11	+33°796	+8°341			10	-60°855	-1°181			10	-29°738	-8°268			13	-0°306	-8°846		
11	+35°400	+2°475			13	-60°532	-39°531			9	-29°550	-48°334			10	+0°004	-16°979		
16	+35°652	+41°654	64	673	9	-60°479	-61°276			9	-28°695	-57°949			9	+0°384	-17°865		
13	+35°725	+33°973			10	-60°028	-49°173			15	-28°014	-45°735	65 680	9°7	9	+0°808	-11°358		
	201					261					321					381			
11	+35°736	+3°227			24	-59°538	-49°116	65 670	9°0	20	-28°004	-4°988	65 681	9°1	9	+0°872	-53°130		
16	+36°103	+20°797			9	-59°190	-16°123			9	-27°141	-29°542			9	+1°316	-49°502		
13	+36°139	+26°783			9	-57°872	-41°432			9	-26°058	-29°359			9	+1°422	-27°783		
11	+36°740	+24°817	64	674	9	-56°142	-50°702			10	-24°361	-16°256			13	+2°212	-54°766		
9	+37°400	+43°018			9	-55°238	-27°527			9	-23°302	-13°821			11	+3°065	-44°545		
10	+37°795	+34°847			16	-55°024	-17°081	65 671	10°0	13	-21°938	-44°331			10	+3°154	-50°740		
10	+38°010	+24°523			13	-54°799	-5°814			11	-21°553	-12°203			10	+3°636	-17°221		
16	+38°352	+42°341	64	675	10	-54°580	-33°401			23	-21°524	-44°436	65 682	9°0	17	+3°796	-33°662	65 693	9°3
13	+38°397	+19°007			14	-54°407	-35°436			17	-21°506	-7°109	65 683	9°2	10	+3°820	-16°355		
18	+38°804	+4°729	64	676	9	-53°957	-48°176			13	-20°037	-23°182			13	+3°985	-53°910	65 695	9°7
	211					271					331					391			
12	+40°263	+61°854	63	696	11	-53°797	-8°428			10	-19°168	-17°461			15	+4°016	-20°191	65 694	9°5
9	+40°582	+30°682			24	-53°441	-14°433	65 672	9°2	12	-18°548	-22°239			9	+4°241	-27°103		
9	+40°882	+48°357			9	-52°161	-11°180			16	-18°501	-57°657	65 684	9°5	13	+4°534	-10°612	65 696	9°6
14	+41°504	+32°468			9	-51°072	-39°585			10	-18°426	-35°789			14	+5°906	-1°253	64 661	9°5
40	+42°546	+42°160	64	677	9	-50°972	-40°295			24	-17°899	-47°006	65 685	8°7	12	+6°886	-22°577		
13	+42°883	+4°534			13	-50°646	-27°529			9	-17°601	-31°263			18	+7°045	-22°540	65 697	9°2
11	+43°679	+16°921			12	-49°679	-1°930			10	-17°263	-5°663			16	+8°188	-54°566	65 698	9°4
12	+43°692	+2°933			16	-49°242	-9°035			10	-16°755	-33°147			10	+10°484	-42°408		
9	+43°948	+8°068			14	-48°661	-1°534			13	-15°626	-16°936			10	+10°495	-36°257		
9	+44°115	+52°104			9	-48°235	-63°415			11	-15°455	-29°887			14	+10°600	-37°605		
	221					281					341					401			
12	+44°606	+10°771	64	678	39	-48°164	-50°575	65 673	8°2	14	-14°382	-24°599			9	+10°798	-49°954		
11	+44°892	+2°018			10	-48°082	-6°714			36	-14°256	-34°485	65 686	8°0	11	+10°812	-31°433		
15	+44°983	+10°342			13	-47°943	-44°330			9	-12°799	-7°073			9	+11°932	-36°991		
9	+45°196	+56°650			14	-46°917	-42°500			9	-12°381	-49°172			10	+13°106	-38°689		
11	+45°721	+0°253			13	-46°196	-34°261			18	-11°955	-61°549	65 687	9°2	9	+13°424	-27°797		
9	+47°764	+30°769			22	-45°960	-39°015	65 674	9°4	13	-11°375	-61°304			11	+13°774	-16°915		
9	+49°277	+43°547			9	-45°775	-15°973			12	-11°248	-3°248			10	+14°015	-28°001		
9	+50°075	+36°189			10	-45°270	-8°683			10	-10°781	-17°871			13	+14°863	-52°714		
9	+50°994	+9°886	64	680	9	-45°094	-8°386			13	-10°765	-0°350			9	+15°031	-28°309		
16	+51°147	+12°536	64	679	10	-44°566	-51°419			14	-9°799	-18°255	65 688	9°7	15	+15°093	-45°475		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.		
11	411,				9	471,			PLATE CENTRE.				18	51,				
17	+15.151	-37.497			9	+48.774	-16.118			7h 21m, - 65°.				9	-37.256	+32.149	64 692 8.9	
10	+16.363	-10.836	65 699	9.2	9	+51.125	-28.690			Plate 1486. 1896, Feb. 7.				9	-36.770	+41.680		
15	+16.457	-35.115			10	+51.648	-37.194			PROVISIONAL CONSTANTS.				9	-35.525	+50.780		
15	+18.925	-16.934	65 700	9.6	9	+51.701	-16.932			a = - .01125 d = + .00020				9	-35.223	+12.573		
15	+19.120	-46.181			15	+51.739	- 2.301	64 681	9.7	b = - .00012 e = - .01110				10	-34.689	+51.271		
13	+19.557	-50.136			9	+51.795	-25.849			c = - .1306 f = - .0086				23	-34.411	+63.454	63 711 7.9	
10	+19.823	-51.247			16	+51.803	-21.698	65 715	9.6	To obtain standard co-ordinates, ξ, η				9	-34.127	+52.107		
12	+21.683	-14.805			14	+51.817	-45.225	65 716	9.7	$\xi = x + ax + by + c$				9	-33.813	+ 9.197		
9	+22.303	-31.195			10	+52.837	-16.058			$\eta = y + dx + ey + f$				11	-32.700	+15.979		
9	+22.321	-48.154			11	+53.313	-42.394							9	-32.437	+52.961		
16	421				17	481								61				
16	+22.446	- 2.926	65 701	9.4	17	+53.805	-14.563	65 717	9.3	14	-64.972	+12.300	64 679	9.5	13	-32.171	+ 0.537	64 694 9.3
11	+24.026	-15.245			11	+54.396	-34.593			13	-64.661	+ 9.169	64 680	9.7	10	-31.747	+ 8.241	
18	+24.561	-55.232	65 702	9.3	11	+54.870	- 1.260			9	-63.847	+40.419			13	-30.931	+60.042	63 713 9.6
9	+25.279	-35.110			14	+55.013	-36.058			10	-63.027	+19.515			16	-30.478	+28.100	64 695 9.3
9	+25.314	-28.633			9	+55.109	-14.377			9	-62.609	+28.335			14	-28.430	+61.245	63 714 9.2
11	+25.466	- 2.239			14	+55.235	- 7.589			9	-62.268	+28.419			14	-27.863	+34.867	64 697 9.7
10	+26.029	-35.552			13	+56.119	-21.402			9	-62.000	+55.241			9	-27.717	+53.123	
17	+26.305	-23.820	65 703	9.3	17	+57.291	-24.206	65 718	9.3	9	-61.558	+25.725			12	-27.679	+16.688	64 696 9.6
11	+26.510	-28.589			9	+57.513	-24.092			19	-59.873	+29.830	64 682	8.9	9	-26.003	+41.834	
12	+26.532	-43.840			9	+58.139	-11.080			16	-57.917	+26.952	64 683	9.4	11	-25.768	+ 4.742	
16	431				11	491				11	-57.349	+ 9.205	64 684	9.4	10	-25.765	+56.701	
16	+26.882	-33.431	65 706	9.7	11	+58.289	-27.559			9	-56.427	+27.326			9	-24.936	+34.687	
13	+26.951	- 3.902	65 704	9.7	10	+58.446	- 0.981			10	-56.124	+ 2.412			12	-23.624	+29.916	64 699 9.7
14	+27.237	-13.532	65 705	9.7	10	+59.682	-20.002			14	-55.959	+51.577	64 685	9.7	9	-23.436	+64.498	
13	+27.630	- 8.352	65 707	9.7	12	+59.725	- 1.259			11	-55.253	+55.515			13	-22.166	+20.944	64 700 9.3
9	+27.637	-51.969			10	+60.133	- 2.174			43	-54.090	+17.355	64 686	7.3	16	-19.602	+31.355	64 701 9.3
10	+27.714	-35.274			13	+61.033	- 8.062			12	-53.534	+55.205	64 687	9.7	11	-19.555	+56.562	
9	+28.607	-21.361			17	+61.242	-15.159	65 719	9.3	9	-53.002	+43.951			12	-19.053	+42.916	
13	+30.122	-30.053			9	+61.350	-22.299			9	-52.373	+ 7.867			9	-17.653	+ 6.408	
13	+31.877	-42.436			9	+62.245	- 8.586			9	-52.257	+14.388			9	-17.610	+47.082	
10	+32.280	-27.144			9	501				21	-51.958	+24.164			9	-17.045	+60.755	
9	441				9	+62.439	-13.264			10	-51.958	+24.164			12	-16.808	+26.962	64 702 9.6
9	+32.453	-20.282			15	+63.154	-18.556	65 720	9.4	9	-51.337	+ 8.354			10	-16.653	+42.376	
9	+33.201	-20.873			9	+64.148	-49.271			12	-50.321	+29.357			13	-16.649	+18.028	64 703 9.3
12	+33.310	-11.304			9	+64.864	- 0.286			10	-50.164	+13.592			9	-15.666	+52.615	
10	+33.473	-22.181								10	-49.374	+ 3.132			11	-15.323	+36.659	
9	+34.123	-15.665								9	-48.362	+46.848			14	-14.785	+15.574	64 705 9.2
11	+35.059	-39.855								9	-48.210	+42.343			12	-13.613	+25.342	64 706 9.7
11	+35.143	-34.285								10	-47.834	+46.584			9	- 8.099	+26.133	
16	+35.218	-37.582	65 708	9.6						9	-46.894	+50.138			14	- 7.865	+60.318	63 724 9.7
13	+35.513	-53.947	65 709	9.7						31	-46.341	+21.931			16	- 7.797	+61.473	63 725 9.5
10	+35.653	- 8.276								10	-45.382	+38.947			9	- 5.871	+62.568	
13	451									19	-44.282	+13.402	64 688	8.8	9	- 5.416	+47.976	
13	+36.212	- 3.740								17	-43.902	+52.893	64 690	9.2	9	- 3.710	+54.587	
10	+37.933	- 9.940								12	-43.493	+57.081			9	- 3.369	+35.277	
10	+39.166	-22.675								9	-43.155	+52.432			10	- 3.221	+23.202	64 708 9.7
14	+39.447	-49.936	65 710	9.7						19	-43.149	+ 9.211	64 689	8.8	9	- 3.154	+49.662	
9	+39.878	-55.884								9	-43.022	+51.243			9	+ 0.497	+14.474	
14	+40.971	-32.526								10	-42.111	+12.687			9	+ 0.809	+20.423	
18	+41.025	-50.527	65 711	9.2						10	-41.303	+13.896			12	+ 0.824	+56.609	
11	+41.073	-32.923								41	-40.924	+43.861			101			
11	+42.692	-11.246								9	-40.542	+21.045			9	+ 1.925	+43.684	
17	+44.027	-32.959	65 713	9.7						9	-40.542	+21.045			12	+ 6.588	+51.348	
19	461									11	-39.828	+46.150			16	+ 7.792	+34.347	64 709 8.9
19	+44.189	-26.659	65 712	9.2						12	-39.278	+48.319	64 691	9.7	9	+ 8.150	+51.634	
9	+45.316	-32.471								11	-38.720	+52.162			10	+ 8.273	+49.168	
11	+45.410	-40.792								11	-38.550	+50.638			18	+ 8.351	+24.385	64 710 9.1
11	+45.649	-63.335								10	-38.077	+ 0.541			13	+10.955	+ 8.403	64 712 9.1
20	+46.420	-36.843	65 714	8.9						9	-38.056	+41.118			9	+11.203	+46.245	
9	+47.164	-31.927								13	-37.562	+47.879	64 693	9.7	42	+11.270	+30.616	64 711 8.1
12	+47.272	-37.552								9	-37.339	+ 6.779			15	+13.569	+11.208	64 713 9.1
12	+47.715	-41.168																
9	+47.910	-24.713																
14	+48.385	-42.094																

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
9	+13°789	+49°819			9	+56°438	+29°460			16	-34°499	-62°125	65 726	8°9	12	+1°706	-18°442	65 748	9°4
10	+19°309	+27°627			9	+57°730	+53°228			14	-34°267	-61°721	65 727	9°2	12	+3°558	-53°055	65 749	9°5
14	+19°504	+43°658	64 714	9°6	14	+57°833	+38°794	64 727	9°7	9	-33°446	-43°792			9	+3°707	-40°791		
9	+20°061	+56°079			10	+59°246	+61°612			9	-33°033	-12°984			11	+3°872	-11°957	65 750	9°4
10	+20°230	+3°878			10	+61°090	+59°376			9	-32°590	-46°144			9	+3°938	-10°303	65 751	9°7
9	+22°854	+27°177			11	+62°263	+33°587			9	-30°787	-56°397			11	+5°028	-55°447		
9	+23°811	+47°916			11	+62°268	+2°391			15	-29°430	-12°796	65 728	9°0	9	+5°091	-36°204		
12	+24°935	+42°342	64 715	9°7	13	+62°733	+64°108	63 750	9°4	9	-29°222	-23°171			12	+5°502	-63°183	65 752	9°7
12	+25°072	+59°868			27	+63°250	+49°867	64 728	8°0	10	-28°263	-17°214	65 730	9°7	9	+6°276	-60°907		
9	+25°659	+47°928			10	+63°838	+52°269			11	-28°074	-43°358	65 729	9°7	9	+8°778	-21°965		
	121					181					241					301			
12	+26°293	+48°670	64 716	9°7	10	+63°852	+16°370			11	-27°829	-48°691			11	+8°807	-49°309		
9	+28°614	+41°778			9	+64°010	+53°164			11	-27°288	-18°980	65 732	9°6	18	+9°786	-16°494	65 753	8°7
12	+31°061	+9°370	64 717	9°7	9	+64°063	+6°676			9	-27°226	-62°568			14	+12°967	-63°407	65 754	9°2
9	+31°304	+13°284			9	-64°626	-41°484			12	-27°170	-42°345	65 731	9°5	14	+14°019	-47°222	65 755	9°5
9	+32°545	+18°692			9	-63°904	-42°367			11	-27°111	-35°996			9	+14°483	-20°896		
11	+32°562	+28°315			11	-63°331	-2°438	64 681	9°7	9	-26°396	-44°758			9	+15°977	-49°781		
11	+32°999	+37°784			9	-62°343	-17°030			10	-26°209	-64°657			10	+17°442	-37°296		
10	+33°660	+7°203			9	-62°086	-28°806			11	-26°131	-36°493	65 733	9°6	14	+17°885	-58°935	65 756	9°5
11	+34°053	+13°824			12	-61°898	-21°783	65 715	9°6	9	-25°554	-64°264			11	+17°932	-43°366		
21	+35°692	+58°228	63 738	8°8	9	-61°284	-16°088			15	-25°334	-54°517	65 734	9°2	11	+17°970	-56°075		
	131					191					251					311			
10	+35°912	+56°240			9	-60°980	-37°248			11	-25°207	-23°287	65 735	9°4	11	+18°456	-55°159		
9	+39°170	+31°202			13	-60°408	-14°534	65 717	9°3	13	-24°598	-14°084	65 736	9°3	9	+18°674	-46°399		
19	+39°946	+51°006	64 718	8°8	9	-60°297	-1°180			14	-23°963	-2°120	64 698	9°0	9	+23°870	-36°793		
12	+40°164	+19°095	64 719	9°7	11	-60°265	-45°234	65 716	9°7	9	-23°704	-43°350			16	+24°343	-44°690	65 757	8°9
11	+40°607	+21°973			12	-59°493	-7°477			11	-23°157	-7°918	65 737	9°7	9	+24°687	-47°851		
9	+40°821	+55°146			9	-58°965	-42°313			9	-22°287	-50°308			11	+24°852	-29°735		
9	+41°140	+51°150			9	-58°426	-34°450			9	-22°241	-40°706			11	+25°577	-38°607		
11	+43°143	+3°811			10	-57°720	-35°878			9	-22°090	-43°920			9	+26°689	-46°622		
11	+43°327	+36°791			11	-57°627	-21°179			9	-21°944	-44°864			19	+26°758	-7°125	65 758	8°5
9	+43°365	+32°758			9	-56°758	-0°667			12	-20°435	-55°656			19	+27°087	-21°502	65 759	8°8
	141					201					261					321			
9	+44°175	+1°418			9	-56°347	-10°760			12	-20°010	-28°551	65 738	9°2	9	+27°592	-38°167		
9	+44°322	+1°151			14	-56°254	-23°892	65 718	9°3	10	-16°788	-59°506			9	+28°379	-43°063		
10	+44°521	+56°115			10	-55°434	-0°842			10	-16°607	-48°680			10	+29°217	-41°020		
18	+44°879	+34°131	64 720	8°7	9	-55°024	-27°160			13	-16°329	-50°901	65 739	9°5	11	+29°779	-31°003		
11	+45°111	+42°273			9	-53°751	-19°003			12	-16°282	-2°397	64 704	9°1	9	+29°872	-33°815		
11	+45°266	+56°293			9	-53°685	-7°523			16	-16°127	-39°609	65 740	9°0	9	+30°235	-27°028		
12	+45°457	+46°725			9	-53°168	-63°323			9	-15°687	-8°484			12	+30°242	-22°812	65 760	9°4
19	+46°119	+25°689	64 722	8°8	14	-52°956	-14°616	65 719	9°3	9	-15°152	-9°660			9	+30°974	-19°008		
34	+46°457	+41°822	64 721	8°1	9	-52°377	-28°750			9	-15°032	-41°024			14	+31°399	-63°624	65 761	9°1
19	+47°392	+50°849	64 723	8°8	9	-52°153	-48°528			11	-14°360	-48°930	65 741	9°7	11	+31°614	-35°179		
	151					211					271					331			
11	+47°614	+63°127			9	-51°908	-12°568			9	-13°096	-47°856			9	+31°659	-45°791		
13	+47°885	+36°893			9	-51°807	-58°236			9	-10°717	-49°209			9	+32°962	-15°044		
9	+48°218	+52°088			12	-50°813	-17°860	65 720	9°4	10	-10°479	-49°034			9	+33°435	-61°396		
9	+48°312	+2°623			9	-49°351	-6°420			9	-10°448	-58°526			10	+33°530	-41°612		
9	+48°544	+14°276			10	-48°946	-9°237			14	-8°524	-54°771	65 742	9°3	29	+33°994	-24°165	65 762	8°4
17	+48°836	+31°824	64 725	8°9	11	-47°667	-48°405			10	-8°031	-0°626	64 707	9°7	9	+34°669	-48°031		
9	+48°838	+11°698			10	-47°048	-28°782			9	-7°052	-48°787			11	+36°413	-51°868		
9	+49°033	+37°247			14	-44°357	-56°880	65 721	9°3	9	-6°652	-48°603			16	+36°633	-64°090	65 763	8°9
9	+49°142	+14°314			9	-43°868	-30°223			15	-6°239	-53°529	65 743	9°1	9	+38°272	-55°046		
9	+50°239	+21°813			11	-43°179	-8°875	65 722	9°7	9	-5°886	-30°068			17	+38°386	-39°268	65 764	9°0
	161					221					281					341			
11	+50°301	+4°284			9	-43°069	-35°264			11	-5°274	-28°432	65 744	9°5	12	+39°289	-52°054	65 765	9°7
9	+50°559	+8°302			11	-42°789	-24°615			9	-5°079	-3°146	65 745	9°6	10	+41°491	-19°184		
10	+51°799	+50°544			10	-42°063	-7°883			10	-4°758	-47°464			9	+41°805	-21°147		
10	+52°290	+39°834			13	-40°805	-35°808	65 724	9°6	9	-4°754	-57°622			9	+41°929	-15°897		
9	+54°209	+61°747			9	-40°351	-37°608			9	-4°007	-55°452			9	+42°436	-29°498		
13	+54°217	+13°889			9	-39°894	-51°732			12	-3°630	-43°693	65 746	9°5	9	+42°834	-29°161		
9	+54°489	+64°499			12	-39°381	-58°391	65 725	9°6	9	-0°860	-2°632			10	+42°857	-38°397		
10	+54°693	+55°275			9	-35°609	-37°003			9	-0°260	-49°552			11	+43°084	-21°859		
13	+54°700	+47°615	64 726	9°7	9	-35°488	-6°071			15	-0°047	-28°153	65 747	9°1	11	+43°102	-54°390	65 766	9°7
9	+55°219	+60°507			9	-35°188	-63°933			9	+1°356	-58°325			9	+43°898	-43°519		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	351,					PLATE CENTRE. 7h 39m, - 65°. Plate 140. 1892, Jan. 30. PROVISIONAL CONSTANTS. $a = - .01158$ $d = - .00055$ $b = - .00020$ $e = - .01130$ $c = + .0273$ $f = - .1188$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51,					111,				
9	+44.880	- 7.797								20	-31.360	+25.048	64 732	8.8	16	- 0.018	+21.858	64 737	9.7	
14	+44.883	-34.920	65 767	9.4						9	-30.822	+27.759			9	+ 0.220	+56.039			
12	+46.292	- 2.753	64 724	9.7						9	-30.129	+61.689			9	+ 0.448	+59.894			
12	+46.447	-46.630								9	-29.813	+41.037			9	+ 0.594	+62.468			
9	+46.531	-45.391								15	-29.690	+ 2.848			10	+ 1.198	+22.599			
12	+46.730	- 5.867	65 768	9.7						12	-28.018	+13.412			12	+ 1.238	+45.091			
13	+47.451	-47.158	65 769	9.6						14	-25.967	+38.121			28	+ 2.935	+45.636	64 738	8.7	
9	+47.989	-40.348								9	-25.612	+28.024			16	+ 3.312	+62.959	63 773	9.4	
9	+49.840	-28.998								12	-24.735	+26.257			9	+ 3.870	+36.317			
9	+50.772	-45.483								9	-23.707	+57.139			18	+ 3.976	+55.501	64 739	9.1	
	361										61					121				
10	+50.880	-62.298				9	-64.714	+60.295		9	-23.449	+34.868			11	+ 4.090	+ 8.402			
10	+51.642	-42.729				11	-64.309	+47.388	64 726	9.7	10	-22.986	+37.872			11	+ 4.513	+28.202		
9	+51.983	-40.440				9	-63.169	+28.473		28	-22.337	+61.387	63 759	8.3	10	+ 4.790	+23.129			
9	+51.987	-32.299				15	-62.400	+13.693		9	-22.313	+18.621			15	+ 4.932	+40.179	64 740	9.6	
9	+52.567	-29.287				10	-60.815	+61.693		9	-22.313	+15.975			14	+ 6.325	+41.475			
15	+52.675	-26.330	65 770	9.2		15	-60.564	+38.805	64 727	9.7	20	-20.928	+29.112	64 734	9.1	11	+ 6.669	+32.815		
10	+53.008	- 1.466				9	-60.085	+ 8.343		10	-19.870	+41.734			10	+ 7.042	+50.771			
10	+53.052	- 2.637				15	-57.507	+64.411	63 750	9.4	12	-19.636	+18.429			12	+ 7.871	+53.107		
11	+53.772	-33.429				36	55.975	+50.249	64 728	8.0	9	-19.273	+59.025			11	+ 7.938	+29.404		
9	+54.238	-31.130				11	-55.771	+33.922		11	-17.993	+23.871			22	+ 8.814	+60.706	63 778	8.8	
	371					11					71					131				
9	+55.409	-51.433				11	-55.554	+52.682		10	-17.715	+17.019			11	+ 9.481	+48.574			
9	+55.884	-39.072				9	-54.958	+53.650		11	-17.506	+ 1.904			10	+10.070	+34.345			
10	+56.559	-35.707				9	-53.783	+59.587		10	-16.953	+42.931			10	+10.390	+37.392			
9	+56.758	- 7.356				11	-53.539	+ 2.807		12	-16.859	+41.705			9	+10.405	+52.559			
9	+57.398	-22.246				11	-52.965	+16.861		17	-16.427	+59.113	63 761	9.0	9	+10.431	+57.417			
10	+58.117	-50.207				10	-52.054	+ 7.214		10	-16.327	+36.649			10	+10.499	+45.653			
9	+58.349	-26.420				9	-51.142	+ 3.398		11	-16.301	+30.166			9	+11.121	+59.585			
11	+58.800	-62.939				11	-50.870	+54.000		16	-16.145	+32.826	64 735	9.7	9	+11.687	+44.137			
11	+60.663	-17.957				11	-50.306	+ 0.908		15	-15.979	+20.563			9	+11.729	+ 8.062			
10	+61.200	-21.914				15	-49.161	+22.829		10	-15.880	+44.395			12	+11.905	+ 4.000			
	381					21					81					141				
16	+61.322	-25.422	65 771	9.1		11	-48.955	+59.143		10	-14.868	+51.207			11	+12.187	+ 7.793			
9	+62.757	- 3.122				9	-48.304	+44.266		10	-14.710	+12.190			11	+12.673	+15.822			
9	+63.986	-44.027				15	-47.363	+60.736	63 752	9.7	15	-14.710	+ 8.360			17	+12.996	+63.322	63 781	9
15	+64.114	-45.922	65 773	8.9		11	-43.498	+28.405		11	-14.636	+32.300			11	+13.221	+57.663			
10	+64.137	- 1.256				15	-43.164	+52.720		12	-14.050	+55.975			11	+15.140	+28.073			
9	+64.581	- 9.046				9	-43.095	+18.621		9	-13.802	+30.236			17	+15.376	+48.562	64 741	9	
						17	-43.019	+27.034	64 730	9.3	15	-12.872	+39.495			10	+18.859	+33.921		
						11	-42.428	+10.700		11	-12.570	+ 5.454			11	+18.867	+20.259			
						9	-42.247	+15.675		11	-12.293	+17.505			9	+19.161	+24.665			
						10	-41.974	+ 3.762		9	-11.504	+ 7.968			9	+19.665	+40.044			
						31					91					151				
						9	-41.812	+ 3.028		12	-10.423	+15.145			17	+20.071	+54.916	64 742	9.1	
						16	-41.729	+ 6.127		9	-10.222	+ 6.770			11	+20.082	+58.013			
						10	-41.715	+45.718		11	- 9.540	+25.772			9	+20.339	+22.667			
						10	-40.677	+ 1.766		9	- 9.419	+16.196			12	+21.204	+17.102			
						9	-40.475	+53.801		11	- 8.599	+ 6.000			15	+21.717	+ 4.095	64 743	9.7	
						16	-40.109	+27.572		11	- 7.819	+43.102			9	+22.075	+30.783			
						9	-39.506	+14.577		9	- 6.998	+45.748			10	+22.597	+34.227			
						10	-38.570	+25.527		15	- 6.840	+56.079			16	+23.011	+ 7.384	64 744	9.3	
						16	-38.200	+36.952		19	- 6.788	+56.075	64 736	8.8	9	+23.197	+ 3.727			
						11	-37.652	+25.331		9	- 5.689	+62.820			11	+23.311	+48.278			
						41					101					161				
						9	-35.802	+16.961		9	- 4.164	+13.827			9	+23.753	+35.372			
						10	-35.648	+23.828		11	- 4.123	+64.235			11	+23.983	+33.943			
						11	-34.876	+23.543		9	- 3.725	+62.989			10	+24.545	+56.396			
						9	-34.862	+48.760		11	- 2.988	+37.082			10	+24.594	+34.863			
						15	-34.470	+20.361		11	- 2.552	+20.119			9	+24.683	+21.636			
						13	-34.062	+32.542		16	- 2.532	+10.189			9	+25.259	+36.412			
						16	-33.617	+16.590	64 731	9.7	9	- 1.483	+26.256		12	+26.081	+61.516	63 791	9.7	
						16	-32.914	+ 4.834		9	- 1.350	+16.317			17	+26.135	+37.443	64 746	9.1	
						9	-31.807	+ 2.028		12	- 0.804	+28.770			15	+26.318	+ 9.785	64 747	9.7	
						11	-31.590	+ 3.628		9	- 0.150	+58.943			9	+27.075	+51.413			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	171,					231,					291,					351,					
12	+27°181	+51°068			9	-60°893	-42°982			11	-25°370	-41°406			12	+1°787	-57°921				
9	+27°445	+22°439			9	-60°273	-62°552			10	-24°876	-34°097			15	+2°089	-55°107	65	790		
11	+29°606	+10°367			10	-59°606	-14°081			14	-24°540	-45°686			11	+2°210	-6°244		9°4		
9	+30°415	+55°518			9	-59°455	-33°545			10	-24°208	-19°368			16	+2°659	-42°986	65	791		
9	+31°082	+15°421			9	-59°124	-31°231			11	-23°866	-16°124			17	+3°084	-12°804	65	792		
12	+31°138	+12°463			10	-58°338	-7°322			11	-23°612	-27°835			9	+3°175	-4°884				
16	+31°804	+13°781	64	748	10	-57°649	-2°668			14	-21°806	-61°105	65	780	9°7	9	+3°728	-33°261			
9	+32°477	+32°009			9	-56°614	-22°127			12	-21°018	-58°349			9	+4°542	-50°950				
9	+32°719	+0°947			9	-56°516	-51°387			9	-21°010	-10°859			10	+5°079	-61°005				
9	+33°025	+40°534			10	-56°490	-35°609			9	-20°443	-32°573			9	+5°414	-64°239				
	181					241					301					361					
9	+33°965	+53°398			12	-56°409	-0°703			11	-17°082	-0°793			9	+5°623	-18°966				
9	+34°153	+3°007			9	-55°384	-26°234			16	-16°785	-13°600	65	781	9°7	9	+5°700	-39°204			
9	+34°381	+9°513			10	-53°907	-49°970			9	-16°136	-53°707			9	+6°368	-44°180				
11	+34°640	+11°577			12	-53°683	-17°619			9	-15°684	-19°391			10	+6°598	-63°520				
16	+35°295	+39°186	64	749	11	-52°860	-21°507			14	-15°583	-46°002	65	782	9°7	10	+7°361	-39°838			
9	+35°629	+13°389			20	-52°471	-25°031	65	771	9°1	37	-15°509	-24°177	65	783	8°8	16	+7°378	-33°708	65	793
38	+36°288	+63°574	63	797	10	-52°306	-62°608			9	-15°092	-14°059			11	+7°911	-41°018		9°4		
9	+36°925	+49°195			9	-50°822	-22°754			12	-14°712	-48°512			11	+8°538	-45°590				
14	+37°456	+29°313	64	750	10	-50°413	-8°434			9	-14°543	-7°490			9	+9°002	-43°985				
20	+39°211	+50°786	64	751	15	-49°148	-11°602	65	772	9°7	14	-14°440	-6°482			9	+9°584	-44°112			
	191					251					311					371					
9	+40°168	+2°952			10	-48°483	-43°368			15	-14°082	-37°372	65	784	9°7	10	+9°710	-7°983			
10	+41°088	+30°507			15	-48°215	-45°266	65	773	8°9	10	-13°894	-13°019			14	+10°015	-57°912	65	794	
15	+41°256	+47°870	64	752	10	-47°613	-17°117			10	-12°537	-40°746			9	+10°365	-1°772		9°6		
11	+41°748	+37°301			10	-46°636	-12°537			42	-12°449	-41°703	65	785	8°4	9	+11°006	-52°672			
15	+42°396	+61°664	63	800	13	-46°487	-36°660			11	-12°341	-34°401			12	+11°009	-2°418				
15	+42°805	+24°384			15	-46°446	-36°744	65	774	9°2	9	-11°622	-19°247			17	+12°493	-8°593	65	795	
10	+43°403	+52°583			10	-44°678	-60°018			9	-11°379	-12°315			48	+13°152	-33°292	65	796		
10	+43°744	+3°851			14	-43°576	-18°190			12	-11°070	-46°283			40	+14°447	-16°913	65	797		
10	+45°330	+59°684			14	-43°182	-10°736			13	-10°872	-15°389			9	+15°426	-2°136		8°8		
10	+45°464	+10°791			10	-41°787	-1°031			11	-10°530	-60°202			11	+15°459	-42°766				
	201					261					321					381					
16	+46°196	+6°184	64	753	9	-41°400	-42°112			26	-9°888	-13°890	65	786	8°9	11	+15°479	-16°368			
10	+46°328	+11°445			9	-41°303	-36°692			10	-9°368	-11°378			9	+16°877	-37°257				
10	+46°403	+18°517			11	-40°586	-31°105			12	-7°960	-6°051			12	+17°917	-27°624	65	798		
9	+49°626	+3°551			9	-40°287	-53°406			9	-7°680	-47°445			15	+18°709	-39°725	65	799		
9	+49°770	+7°994			11	-40°164	-23°035			9	-7°010	-3°655			15	+19°335	-56°604	65	800		
11	+50°869	+0°585			11	-39°811	-11°377			15	-6°198	-60°985	65	787	9°7	14	+19°995	-33°445	65	801	
9	+50°979	+53°656			9	-39°329	-40°570			9	-5°680	-35°896			11	+21°443	-49°338		9°7		
11	+53°053	+58°376	63	811	11	-38°764	-18°917			9	-5°131	-32°451			11	+21°837	-53°565				
9	+53°542	+2°569			12	-38°664	-4°754			11	-4°770	-35°731			9	+22°074	-47°618				
9	+53°869	+6°294			9	-38°360	-46°064			10	-4°739	-23°176			10	+22°519	-19°505				
	211					271					331					391					
11	+54°264	+9°318			10	-36°756	-37°549			13	-4°344	-2°011			16	+22°851	-3°218	64	745		
13	+54°535	+17°218	64	754	11	-35°642	-12°945			11	-4°134	-14°314			9	+22°934	-17°860		9°4		
11	+54°671	+29°612			34	-33°618	-28°708	65	776	9°0	9	-3°616	-47°576			9	+24°623	-17°689			
16	+54°711	+12°796	64	755	12	-33°134	-64°122	65	775	9°5	14	-3°190	-50°663	65	788	9°7	10	+24°837	-56°824		
9	+54°887	+32°555			15	-32°498	-15°542	65	778	9°7	13	-3°182	-53°751	65	789	9°7	14	+25°077	-43°584	65	802
16	+55°744	+17°410	64	756	15	-32°496	-58°369	65	777	9°4	11	-3°130	-17°809			11	+26°257	-37°122			
35	+56°325	+25°266	64	757	12	-31°803	-21°717			9	-2°960	-6°055			9	+26°762	-30°109				
20	+56°542	+9°854	64	758	11	-31°162	-39°011			11	-2°887	-28°738			10	+27°149	-24°306				
9	+56°783	+11°590			33	-30°514	-21°093	65	779	8°9	9	-2°176	-53°521			9	+27°922	-2°628			
11	+59°499	+11°816			11	-30°047	-35°805			9	-1°695	-15°837			10	+28°241	-60°194				
	221					281					341					401					
9	+60°113	+21°553			12	-30°034	-1°296			9	-0°706	-1°260			9	+28°437	-20°301				
9	+61°936	+26°578			12	-29°843	-32°392			9	-0°282	-23°926			10	+28°511	-40°987				
10	+63°233	+38°281			14	-28°418	-16°586			9	-0°115	-63°202			11	+28°560	-29°127				
13	-64°776	-47°697	65	769	9	-28°415	-60°880			9	-0°102	-42°379			13	+28°657	-45°212	65	803		
10	-62°493	-1°719			20	-27°956	-1°188	64	733	9°1	10	-0°034	-57°903			12	+28°751	-17°793		9°6	
12	-62°371	-2°881			13	-27°390	-44°220			10	+0°141	-54°753			12	+29°779	-36°150				
9	-61°564	-45°801			9	-27°198	-20°262			10	+0°149	-30°439			13	+31°376	-39°220	65	804		
9	-61°290	-32°546			11	-26°987	-63°070			9	+0°864	-23°556			9	+31°526	-44°219		9°7		
16	-61°044	-26°559	65	770	9	-26°772	-1°858			9	+1°208	-23°069			60	+31°685	-50°463	65	806		
9	-60°950	-29°503			9	-25°464	-31°583			12	+1°718	-29°409			9	+32°144	-24°225		8°1		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	411,					PLATE CENTRE.					51,				111,						
15	+32'299	-45'111	65	807	9'4		7h 57m, - 65°.				15	-52'856	+37'849		10	-41'601	+58'959				
34	+32'507	-14'506	65	805	9'0		Plate 3862. 1915, Feb. 10.				11	-52'366	+21'943		11	-41'568	+50'486				
9	+32'949	-8'855					PROVISIONAL CONSTANTS.				10	-52'310	+36'731		9	-41'360	+7'577				
9	+33'240	-29'006				a = - '01151	d = + '00106			9	-52'197	+5'279		10	-41'297	+13'360					
30	+33'638	-11'496	65	808	9'1	b = - '00123	e = - '01126			11	-52'128	+54'177		12	-41'238	+14'741					
9	+33'710	-24'926				c = - '0150	f = - '0699			10	-51'872	+19'885		9	-41'145	+28'081					
15	+35'125	-53'289	65	809	9'2	To obtain standard co-ordinates, ξ, η				9	-51'557	+36'135		9	-41'011	+30'877					
11	+35'400	-28'235				$\xi = x + ax + by + c$				10	-51'326	+35'569		9	-40'854	+44'406					
9	+36'352	-34'490				$\eta = y + dx + ey + f$				10	-51'245	+5'101		9	-40'664	+53'046					
26	+36'515	-29'273	65	810	9'1					10	-51'148	+45'607		9	-40'620	+64'245					
	421					12	-64'619	+0'096			61				121						
11	+36'552	-0'302				9	-63'929	+8'777		15	-51'081	+15'709		11	-40'433	+33'639					
11	+37'084	-57'726				9	-63'459	+54'242		9	-50'769	+42'990		10	-39'892	+14'304					
9	+37'496	-47'496				9	-63'416	+5'778		9	-50'712	+62'711		9	-39'792	+36'280					
15	+37'637	-32'312	65	811	9'6	9	-63'260	+13'786		9	-50'694	+28'752		11	-39'742	+17'873					
14	+38'763	-31'662	65	812	9'6	10	-62'842	+32'247		9	-50'602	+45'036		11	-39'737	+51'593					
15	+39'017	-22'507	65	813	9'6	12	-62'838	+29'327		10	-49'639	+18'095		16	-39'586	+41'161					
10	+39'232	-62'471				12	-62'155	+53'943		9	-49'518	+9'097		11	-39'438	+22'774					
10	+39'458	-17'901				12	-62'120	+16'932	64	754	9'6	9	-49'427	+44'031		11	-39'380	+48'219			
12	+39'845	-15'589				17	-62'083	+2'264		9	-49'380	+26'657		9	-39'355	+47'063					
9	+40'122	-63'744				11	-62'020	+5'979		11	-49'112	+58'622		56	-39'351	+58'301	63	828	7'9		
	431					13	-61'839	+9'035			71				131						
13	+40'170	-18'219				9	-61'831	+28'499		15	-48'772	+51'741	64	759	9'7	10	-38'862	+34'001			
10	+40'238	-29'442				9	-61'750	+63'694		9	-48'761	+25'249		10	-38'774	+16'137					
9	+40'324	-38'551	65	814	9'7	9	-61'663	+29'271		11	-48'681	+31'633		10	-38'332	+45'378					
11	+40'485	-53'744				19	-61'636	+12'538	64	755	9'4	9	-48'650	+4'171	9	-38'135	+3'237				
10	+40'578	-45'323				9	-61'184	+62'732		9	-48'388	+62'125		12	-38'114	+14'442					
9	+41'662	-10'095				20	-60'931	+17'203	64	756	9'3	9	-48'309	+61'592	9	-38'042	+16'631				
11	+42'009	-7'678	65	815	9'5	38	-60'902	+25'090	64	757	8'3	11	-48'287	+34'813	9	-37'618	+13'280				
14	+42'037	-22'755	65	816	9'4	9	-60'631	+5'441		9	-48'148	+26'264	9	-48'148	+26'264	13	-37'612	+25'261			
14	+42'441	-44'778								10	-47'642	+62'128	9	-47'868	+24'849	9	-37'471	+20'459			
9	+42'793	-22'393				21				10	-47'398	+40'993	11	-47'642	+62'128	11	-37'336	+43'564			
	441					10	-60'544	+12'092			81				141						
17	+43'107	-30'733	65	817	9'4	9	-60'478	+56'391		10	-47'237	+57'575	10	-47'398	+40'993	12	-37'298	+41'180			
9	+45'291	-0'063				10	-59'807	+3'574	64	758	8'9	11	-47'237	+57'575	16	-36'943	+21'235				
12	+45'734	-54'883	65	818	9'7	25	-59'591	+9'711		12	-47'009	+37'095	12	-47'237	+57'575	11	-36'393	+20'618			
13	+46'749	-49'695	65	820	9'4	10	-59'550	+28'185		9	-46'466	+25'686	9	-47'009	+37'095	11	-36'350	+64'632			
14	+47'516	-14'859	65	819	9'7					9	-45'871	+16'394	9	-46'466	+25'686	11	-36'350	+64'632			
9	+47'847	-35'967				11	-59'496	+11'470		9	-45'871	+16'394	9	-45'871	+16'394	9	-35'928	+44'502			
10	+47'951	-31'132				10	-59'113	+45'217		12	-45'857	+16'897	10	-45'857	+16'897	16	-35'864	+34'709	64	763	9'6
12	+48'716	-3'243				9	-59'088	+36'483		10	-45'649	+45'808	10	-45'649	+45'808	10	-35'714	+39'315			
9	+48'930	-43'464				10	-58'946	+55'501		9	-45'602	+26'750	9	-45'602	+26'750	10	-35'479	+35'576			
9	+49'004	-63'566				9	-58'856	+45'324		9	-45'525	+7'291	9	-45'525	+7'291	9	-35'406	+35'085			
	451									16	-45'358	+63'252	63	826	9'7	11	-35'345	+22'762			
14	+49'595	-7'959	65	821	9'7	31					91				151						
14	+50'105	-5'623	65	822	9'7	9	-58'066	+22'097		14	-45'102	+63'941		9	-35'058	+40'228					
9	+50'251	-36'565				9	-57'801	+13'240		15	-44'727	+35'917		20	-34'956	+13'880	64	764	9'4		
9	+50'729	-35'458				9	-57'321	+23'949		9	-44'719	+11'968		11	-34'737	+51'409					
9	+52'883	-45'363				9	-57'275	+61'722		11	-44'687	+39'493		12	-34'722	+27'022					
10	+54'223	-25'753				9	-56'822	+0'558		9	-44'610	+2'803		15	-34'710	+13'402	64	765	9'7		
11	+56'089	-2'439				15	-56'787	+11'881						9	-34'549	+22'212					
10	+56'816	-54'796				9	-55'521	+5'132		9	-44'483	+20'264		10	-34'714	+39'315					
13	+58'387	-21'222	65	823	9'6	12	-55'409	+26'786		9	-44'305	+33'199		10	-35'479	+35'576					
12	+58'656	-2'919				9	-55'389	+10'453		9	-43'914	+44'476		9	-35'406	+35'085					
	461					9	-54'947	+28'361		12	-43'691	+32'402		9	-33'823	+57'779					
9	+58'859	-36'300				41				14	-43'624	+18'027		22	-33'811	+54'985	64	766	9'3		
9	+59'158	-42'723				14	-54'906	+38'538			101				161						
12	+59'692	-55'262	65	825	9'4	11	-54'888	+56'611		12	-43'125	+56'905		26	-33'732	+47'766	64	767	9'2		
9	+59'721	-36'500				9	-54'690	+63'047		9	-42'882	+49'410		9	-33'723	+64'711					
13	+60'200	-20'820	65	824	9'7	9	-54'388	+61'863		9	-42'502	+24'413		9	-33'660	+11'050					
19	+60'564	-35'580	65	826	9'0	15	-54'226	+14'098		16	-42'386	+16'200		16	-33'503	+3'918					
11	+60'669	-17'023				9	-54'061	+27'548		11	-42'334	+41'438		9	-33'266	+14'914					
72	+62'001	-58'156	65	827	6'3	9	-53'986	+30'535		14	-42'315	+27'232		12	-33'237	+23'336					
10	+62'882	-50'237				10	-53'512	+45'799		9	-42'037	+8'542		19	-33'176	+40'704	64	768	9'4		
9	+62'910	-40'563				10	-53'407	+40'899		18	-41'984	+31'073	64	760	9'4	9	-33'102	+15'898			
	471					10	-53'176	+62'712		12	-41'942	+34'253		11	-33'049	+9'459					
10	+64'903	-11'597								9</											

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.					
9	171, -32°56'0	+44°8'16	64	769	8°9	11	231, -23°185	+43°330		10	291, -12°942	+38°907				9	351, -1°828	+21°731						
38	-32°522	+13°792				9	-23°117	+16°379		9	-12°908	+28°626				10	-1°317	+29°982						
9	-32°275	+28°962				9	-23°074	+46°876		10	-12°880	+37°133				10	-1°256	+1°440						
15	-32°193	+61°814				9	-22°919	+33°342		11	-12°847	+41°990				12	-1°248	+21°817						
10	-32°116	+18°477				9	-22°862	+10°971		10	-12°681	+9°342				10	-1°181	+10°432						
26	-32°113	+51°777	64	771	9°1	9	-22°450	+28°370		16	-12°544	+12°723	64	786	9°6	9	-1°137	+5°073	64	790	9°4			
9	-32°044	+11°978	9	-22°347	+37°881	16	-12°376	+19°816		9	-1°116	+64°825												
22	-32°035	+25°474	64	770	9°1	9	-21°808	+45°659		9	-12°371	+23°127				18	-1°069	+31°009						
9	-32°021	+23°699	10	-21°755	+64°309	9	-12°201	+54°365		11	-0°811	+2°146												
10	-31°932	+26°142	15	-21°372	+38°568	9	-11°841	+30°923		11	-0°487	+34°085												
	181					10	241	-21°339	+22°586		11	301	-11°478	+63°176		9	-0°331	+29°395						
9	-31°871	+5°909	9	-21°212	+52°969	10	-11°185	+59°893	9		-0°288	+27°075												
11	-31°755	+17°701	10	-21°062	+26°880	9	-11°178	+13°356	9		+0°237	+42°242												
9	-31°725	+9°155	10	-20°686	+27°792	10	-11°078	+25°123	15		+0°443	+40°040												
11	-31°642	+11°765	24	-20°493	+13°273	9	-10°890	+13°248	10		+0°562	+7°319												
11	-31°622	+51°352																						
10	-31°406	+31°877	64	773	8°8	12	-20°423	+17°875	64	780	9°4	9	-10°841	+3°852	64	787	9°4	10	+0°653	+61°030				
12	-31°301	+53°769				15	-20°371	+17°602				9	-10°787	+31°925				9	+0°877	+8°051				
9	-31°077	+49°092				9	-20°340	+7°572				18	-10°696	+37°131				9	+0°925	+42°700				
32	-31°002	+34°059				18	-19°718	+11°306				13	-10°633	+5°030				15	+1°180	+50°143				
9	-30°923	+27°920				11	-19°432	+41°773				17	-10°049	+45°396				11	+1°261	+46°173				
	191					9	251	-19°299	+9°450		11	311	-9°591	+27°681		10	+1°479	+36°695						
9	-30°883	+63°231	9	-19°158	+7°894	9	-9°414	+13°974	11		+2°035	+9°511												
9	-30°902	+33°759	11	-19°146	+52°527	9	-9°325	+2°555	15		+2°314	+51°221												
9	-30°735	+52°925	9	-19°026	+60°571	9	-9°325	+4°702	9		+2°370	+23°044												
9	-30°726	+14°860	10	-18°973	+29°871	10	-9°236	+6°981	9		+2°452	+5°895												
10	-30°448	+15°175																						
9	-30°439	+28°557	64	774	9°7	11	-18°888	+51°373	64	781	9°4	13	-9°181	+2°331	64	788	9°0	10	+2°619	+47°856	64	793	8°7	
11	-30°071	+25°022				11	-18°541	+3°723				15	-8°142	+31°567				11	+2°994	+29°828				
9	-30°043	+21°936				9	-18°528	+20°280				15	-8°133	+20°273				38	+3°057	+16°089				
15	-29°850	+28°318				9	-18°305	+37°915				9	-7°945	+53°982				9	+3°188	+25°739				
11	-29°784	+34°897				20	-18°242	+15°498				10	-7°753	+31°594				26	+3°327	+55°431				
	201					9	261	-18°230	+40°472	64	782	9°7	9	321	-7°384	+16°310	64	792	9°0					
10	-29°734	+0°820	11	-17°903	+12°730	9	-7°385	+25°152	15				+3°760	+32°233										
9	-29°608	+53°125	17	-17°773	+45°732	9	-7°385	+25°152	16				+3°764	+6°775										
10	-29°226	+13°984	10	-17°766	+17°687	9	-6°772	+37°509	12				+3°767	+23°359										
9	-29°034	+46°376	11	-17°487	+45°616	12	-6°757	+56°261	11				+3°806	+39°550										
9	-28°718	+5°679																						
18	-28°536	+2°673	64	774	9°7	9	-17°477	+60°276	63	843	9°1	10	-6°650	+46°277	64	788	9°0	9	+3°972	+57°362	64	794	8°2	
9	-28°492	+3°258				15	-16°888	+4°381				9	-6°473	+48°248				10	+4°053	+19°225				
10	-28°170	+0°030				10	-16°807	+9°710				10	-6°373	+20°763				9	+4°462	+31°507				
9	-27°880	+45°926				11	-16°728	+22°522				15	-6°060	+10°742				11	+4°790	+3°384				
9	-27°045	+45°935				22	-16°641	+63°884				12	-6°011	+28°251				10	+4°842	+61°089				
	211					9	271	-15°863	+11°320		10	331	-5°815	+57°501	63	855	8°8	40	+4°848	+44°348	64	794	8°2	
10	-27°516	+37°101	11	-15°771	+61°559	16	-5°809	+45°752	9		+4°853	+47°654												
10	-26°777	+34°575	9	-15°753	+2°397	12	-5°250	+34°838	9		+5°211	+63°069												
9	-26°590	+11°710	10	-15°674	+23°860	10	-5°209	+61°192	10		+5°263	+28°515												
10	-26°182	+8°737	9	-15°392	+42°440	10	-5°059	+13°362	10		+5°307	+41°201												
11	-25°806	+2°697																						
9	-25°489	+15°655	64	777	9°7	9	-15°231	+59°136	64	783	9°4	11	-4°866	+8°229	64	789	9°7	22	+5°414	+10°054	64	795	9°1	
10	-25°340	+56°731				9	-14°845	+57°020				28	-4°349	+33°063				9	+5°581	+45°758				
11	-25°183	+44°766				17	-14°651	+11°364				9	-4°265	+27°081				10	+6°013	+22°173				
11	-24°951	+15°666				19	-14°573	+28°224				10	-4°202	+24°642				12	+6°124	+44°551				
10	-24°847	+42°692				12	-14°487	+51°910				12	-3°808	+57°130				12	+6°364	+2°336				
	221					10	281	-14°392	+6°279	64	784	8°8	30	-3°143	+57°793	63	855	8°8	11	+6°668	+5°859	64	796	9°5
9	-24°845	+34°576	28	-14°242	+33°839	15	-3°135	+10°756	10				+6°778	+60°055										
11	-24°760	+34°363	12	-14°027	+1°284	17	-2°924	+24°543	10				+6°855	+63°000										
9	-24°486	+31°324	9	-13°783	+41°559	15	-2°665	+51°479	10				+6°903	+48°518										
18	-24°198	+28°411	9	-13°770	+44°020	15	-2°394	+43°945	11				+7°109	+25°181										
10	-24°154	+14°775																						
15	-24°140	+50°207	64	776	8°5	9	-13°627	+42°530		11	-2°143	+32°585	63	856	9°7	9	+7°227	+31°713	64	796	9°5			
9	-24°127	+36°019				9	-13°581	+21°246		11	-2°139	+28°256				11	+7°269	+38°830						
36	-24°103	+19°562				9	-13°436	+12°326		13	-1°990	+32°127				9	+7°351	+57°147						
12	-23°520	+32°024				9	-13°272	+35°381		17	-1°976	+64°263				18	+7°560	+32°402						
10	-23°216	+14°109				9	-13°254	+31°417		10	-1°923	+5°325				18	+7°570	+7°471						

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	411,		64	797	9'1		471,		64	804	9'7		531,		64	808	9'7		591,		64	812	9'7
10	+ 7'598	+ 0'129				12	+17'579	+11'449				9	+24'496	+30'670				9	+35'751	+10'874			
20	+ 8'143	+42'569				16	+17'602	+45'250				9	+24'497	+23'789				10	+35'824	+20'055			
12	+ 8'469	+40'780				9	+17'718	+24'324				9	+24'641	+ 5'821				16	+36'066	+45'736			
11	+ 8'495	+17'060				9	+17'730	+17'882				9	+24'713	+ 4'622				11	+36'322	+46'900			
10	+ 8'511	+26'315				12	+17'838	+46'562				9	+24'803	+48'261				9	+36'357	+32'533			
9	+ 8'605	+54'533				9	+17'845	+11'527				9	+24'808	+ 1'370				9	+36'505	+ 7'428			
9	+ 8'627	+15'769				12	+17'899	+10'897				16	+25'301	+49'193				17	+36'624	+23'303			
15	+ 8'701	+43'267				9	+18'036	+48'106				11	+25'382	+ 1'676				9	+36'777	+25'400			
17	+ 9'004	+25'187				9	+18'081	+17'527				12	+25'422	+26'506				9	+36'875	+34'584			
9	+ 9'155	+21'327	12	+18'096	+18'370	9	+25'529	+ 3'835	18	+36'875	+47'452												
	421		64	798	9'7		481		64	805	9'6		541		64	809	9'7		601		64	813	9'7
11	+ 9'186	+50'660				12	+18'113	+43'547				9	+25'954	+58'750				11	+36'884	+49'810			
9	+ 9'694	+55'997				9	+18'316	+41'150				11	+26'160	+29'742				10	+37'205	+55'896			
11	+ 9'778	+56'789				16	+18'334	+55'932				9	+26'629	+63'119				9	+37'534	+21'002			
9	+ 9'842	+32'614				9	+18'391	+14'801				9	+26'729	+44'244				44	+37'647	+39'412			
9	+ 9'981	+ 5'932				11	+18'409	+59'096				16	+26'818	+55'964				15	+37'703	+13'605			
9	+10'222	+36'250				16	+18'437	+ 7'905				15	+26'813	+28'990				9	+37'989	+29'367			
9	+10'349	+ 0'560				16	+18'448	+40'999				9	+27'361	+20'677				10	+38'133	+17'839			
9	+10'813	+17'786				9	+18'587	+36'160				9	+27'607	+20'897				10	+38'164	+46'456			
15	+10'969	+64'795				13	+18'608	+51'436				16	+27'666	+52'500				9	+38'192	+54'650			
9	+11'336	+30'709	14	+18'936	+44'573	9	+27'989	+39'247	9	+38'510	+55'555												
	431		64	799	9'7		491		64	806	9'7		551		64	810	9'1		611		64	815	8'1
12	+11'732	+17'510				9	+18'958	+63'325				18	+28'262	+37'822				11	+38'564	+63'601			
12	+11'846	+34'540				11	+19'445	+37'552				9	+28'393	+20'025				9	+38'695	+23'437			
9	+12'188	+41'939				11	+19'501	+48'890				10	+28'799	+30'050				9	+38'923	+13'847			
9	+12'296	+61'138				11	+19'612	+46'642				16	+28'827	+ 3'576				11	+39'063	+17'835			
9	+12'460	+37'468				9	+20'483	+22'687				16	+28'943	+23'550				9	+39'107	+25'459			
10	+12'476	+ 7'575				12	+20'512	+56'279				14	+28'976	+55'310				12	+39'440	+61'997			
9	+12'554	+45'617				10	+20'612	+11'336				17	+29'268	+54'783				12	+39'770	+22'631			
16	+12'608	+37'262				18	+20'737	+ 3'801				9	+29'329	+31'464				10	+40'039	+33'134			
9	+12'711	+ 2'440				11	+20'905	+50'857				9	+29'396	+27'747				10	+40'042	+15'288			
9	+12'919	+40'166	9	+20'903	+25'247	19	+29'859	+36'045	9	+40'092	+61'357												
	441		64	800	8'9		501		64	807	9'7		561		64	811	9'1		621		64	816	8'1
11	+13'025	+42'219				11	+20'978	+12'300				15	+30'110	+56'178				9	+40'120	+55'900			
11	+13'081	+42'245				9	+21'270	+28'235				10	+30'209	+32'387				11	+40'401	+28'880			
16	+13'146	+37'790				16	+21'386	+18'859				26	+30'320	+30'780				12	+40'404	+28'921			
11	+13'192	+53'770				18	+21'435	+15'335				10	+30'340	+34'988				9	+40'608	+42'377			
14	+13'328	+15'766				9	+21'518	+27'542				11	+30'505	+49'508				9	+40'686	+57'494			
9	+13'413	+48'639				12	+21'623	+ 5'860				11	+30'606	+ 7'279				15	+40'910	+20'335			
9	+13'740	+46'063				15	+21'646	+34'608				10	+30'635	+53'427				9	+40'910	+49'030			
9	+13'996	+31'194				9	+21'687	+59'043				10	+30'759	+13'554				12	+40'922	+45'675			
11	+14'463	+15'819				11	+22'235	+40'602				9	+31'002	+27'533				16	+40'924	+48'234			
9	+14'488	+45'095	11	+22'315	+59'305	10	+31'247	+17'025	15	+41'155	+34'304												
	451		64	801	8'3		511		64	808	9'7		571		64	812	9'1		631		64	817	8'1
22	+14'777	+38'189				11	+22'890	+57'495				18	+31'302	+ 6'039				9	+41'356	+ 3'137			
9	+15'097	+53'241				10	+22'895	+19'364				11	+31'381	+ 2'511				11	+41'444	+17'932			
11	+15'197	+ 6'563				11	+22'901	+39'922				15	+31'497	+40'024				12	+41'489	+18'417			
9	+15'238	+32'728				9	+22'918	+21'234				10	+31'545	+57'320				12	+41'746	+30'944			
9	+15'247	+ 8'335				11	+22'997	+42'920				12	+31'746	+60'454				10	+41'804	+13'877			
10	+15'305	+17'871				9	+23'034	+57'013				9	+32'372	+10'686				13	+41'878	+20'382			
36	+15'437	+26'373				9	+23'113	+63'063				10	+32'899	+19'641				11	+41'946	+32'271			
15	+15'830	+ 4'289				15	+23'226	+11'642				9	+33'060	+32'475				11	+42'013	+ 8'190			
16	+16'222	+27'461				12	+23'343	+63'775				12	+33'073	+37'044				10	+42'170	+15'057			
9	+16'317	+13'677	10	+23'398	+15'539	9	+33'174	+51'406	10	+42'272	+45'444												
	461		64	802	9'6		521		64	809	9'7		581		64	813	9'1		641		64	818	8'1
11	+16'394	+49'224				9	+23'554	+17'275				11	+33'305	+ 1'880				11	+42'344	+44'595			
9	+16'435	+26'379				16	+23'771	+18'553				16	+33'373	+15'324				10	+42'523	+27'324			
10	+16'444	+21'183				10	+23'819	+44'410				11	+33'408	+26'527				9	+42'655	+63'352			
14	+16'455	+21'579				11	+23'826	+31'422				11	+33'787	+16'025				11	+42'899	+34'519			
12	+16'637	+32'594				10	+24'002	+ 6'911				10	+33'800	+ 3'628				10	+42'900	+44'980			
11	+16'712	+40'029				15	+24'113	+48'368				12	+33'912	+ 8'417				9	+42'926	+49'798			
11	+16'726	+53'484				9	+24'173	+61'760				9	+34'343	+12'854				13	+43'175	+58'636			
15	+16'994	+19'769				9	+24'179	+62'255				16	+34'714	+45'642				9	+43'452	+39'801			
9	+17'040	+11'273				9	+24'212	+31'958				10	+35'241	+ 5'899				9	+43'511	+33'397			
9	+17'526	+51'746	9	+24'305	+61'279	9	+35'312	+16'883	11	+43'772	+10'333												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651					711					771					831			
10	+43° 9'00	+35° 35'3			9	+53° 0'18	+51° 1'82			10	-62° 2'40	-35° 8'84			10	-48° 6'90	-5° 0'18		
9	+43° 9'39	+5° 1'20			10	+53° 2'13	+8° 2'18			10	-62° 2'30	-58° 7'28			21	-48° 5'58	-6° 9'35	65	828
10	+44° 0'01	+21° 5'78			10	+53° 2'72	+50° 5'60			12	-62° 0'27	-64° 0'19			9	-48° 3'35	-49° 5'21		
20	+44° 3'40	+2° 5'65	64	816	13	+53° 6'00	+21° 7'53			9	-61° 6'27	-53° 0'44			9	-48° 0'25	-8° 0'65		
13	+44° 8'83	+35° 1'31		9'4	10	+53° 6'76	+20° 6'16			9	-61° 4'98	-38° 5'76			10	-47° 7'69	-16° 9'42		
12	+45° 0'35	+32° 5'26			10	+53° 7'69	+9° 6'20			9	-61° 4'32	-63° 8'24			11	-47° 5'53	-4° 9'63		
9	+45° 0'49	+16° 2'70			11	+53° 7'73	+1° 9'21			9	-61° 1'78	-45° 9'14			10	-47° 4'22	-38° 0'78		
9	+45° 1'79	+53° 4'36			12	+53° 9'09	+3° 4'81			10	-60° 7'01	-48° 8'34			12	-47° 2'39	-47° 8'45		
9	+45° 2'85	+33° 1'71			10	+53° 9'91	+9° 8'25			9	-59° 8'87	-48° 2'42			11	-47° 1'76	-5° 7'69		
9	+45° 3'66	+45° 8'36			9	+54° 2'58	+41° 8'91			9	-59° 7'28	-1° 1'73			9	-47° 1'56	-25° 8'86		
	661					721					781					841			
10	+45° 4'09	+31° 0'00			9	+54° 4'11	+5° 2'08			12	-59° 4'47	-25° 9'48			9	-47° 1'25	-14° 7'32		
12	+45° 4'40	+53° 8'39			13	+54° 6'33	+61° 3'36			12	-59° 4'34	-45° 6'04			14	-46° 8'23	-52° 4'47		
10	+45° 4'50	+22° 9'68			11	+54° 7'96	+5° 8'40			13	-59° 2'00	-2° 5'66			9	-46° 7'78	-16° 3'43		
9	+45° 7'77	+43° 4'88			9	+54° 9'88	+46° 6'27			9	-59° 0'30	-1° 2'44			9	-46° 7'13	-31° 9'71		
11	+45° 7'99	+15° 9'79			10	+55° 0'10	+62° 6'06			9	-58° 9'45	-16° 2'13			11	-46° 4'73	-28° 3'14		
9	+45° 8'92	+23° 0'57			10	+55° 2'87	+44° 9'15			9	-58° 5'22	-31° 7'70			11	-46° 3'16	-8° 9'63		
15	+46° 0'12	+26° 3'71			9	+55° 3'60	+4° 6'60			10	-58° 2'98	-45° 1'33			9	-46° 2'62	-18° 1'08		
12	+46° 2'56	+32° 5'84			14	+55° 5'40	+26° 5'53			11	-58° 2'67	-54° 7'18			9	-46° 1'80	-42° 7'39		
12	+46° 5'28	+36° 7'56			9	+55° 8'28	+63° 9'60			10	-57° 5'34	-47° 7'09			14	-46° 0'78	-22° 8'21		
32	+46° 8'28	+56° 7'44	63	886	9	+55° 8'83	+21° 0'11			9	-57° 1'49	-32° 8'23			11	-45° 5'66	-5° 3'40		
	671					731					791					851			
11	+46° 9'96	+2° 1'05			12	+56° 1'36	+32° 4'51			15	-56° 6'22	-2° 8'66			12	-45° 4'74	-24° 5'11		
11	+47° 1'36	+4° 1'73			12	+56° 4'70	+20° 3'12			10	-56° 6'16	-9° 5'39			9	-45° 2'73	-13° 7'04		
10	+47° 2'66	+10° 9'60			12	+56° 7'40	+9° 2'06			9	-56° 4'25	-11° 6'34			9	-44° 6'92	-17° 5'30		
12	+47° 2'94	+14° 3'60			9	+56° 9'43	+3° 5'22			17	-55° 6'26	-21° 1'37	65	823	9	-44° 6'04	-34° 3'77		
10	+47° 3'63	+64° 8'23			11	+57° 6'58	+33° 2'57			12	-55° 0'77	-56° 2'76			10	-44° 5'14	-12° 2'28		
12	+47° 3'64	+48° 8'32			10	+57° 9'58	+47° 6'15			14	-54° 8'48	-54° 7'46			10	-44° 4'50	-55° 4'54		
12	+47° 3'82	+25° 6'71			10	+58° 0'50	+24° 3'05			9	-54° 7'19	-7° 5'12			9	-44° 2'53	-13° 8'42		
10	+47° 9'26	+13° 6'68			10	+58° 4'68	+1° 3'59			9	-54° 2'37	-7° 2'42			9	-44° 1'25	-39° 1'36		
11	+48° 1'05	+14° 5'92			9	+59° 1'57	+40° 2'71			10	-54° 0'92	-42° 8'91			26	-44° 0'67	-38° 7'88	65	829
9	+48° 2'14	+20° 1'76			9	+59° 5'98	+47° 3'03			12	-54° 0'87	-36° 1'44			11	-43° 8'94	-62° 5'03		9'0
	681					741					801					861			
9	+48° 3'46	+62° 7'23			9	+59° 6'94	+2° 9'63			16	-53° 8'39	-20° 6'17	65	824	9	-43° 8'28	-43° 1'65		
26	+48° 6'15	+40° 8'34	64	817	18	+59° 8'39	+41° 3'95	64	822	15	-53° 6'32	-16° 7'94			12	-43° 2'39	-34° 5'01		
9	+48° 7'94	+55° 4'60			9	+59° 9'80	+48° 6'77			14	-53° 3'43	-42° 5'37			9	-42° 8'54	-12° 3'60		
9	+48° 8'08	+51° 2'00			18	+60° 0'99	+64° 9'74	63	894	12	-53° 2'35	-36° 2'69			9	-42° 7'98	-55° 5'80		
14	+48° 9'28	+21° 1'58			9	+60° 1'92	+16° 0'33			10	-53° 1'26	-24° 5'80			9	-42° 7'20	-16° 6'63		
9	+49° 0'18	+14° 2'76			9	+60° 6'09	+8° 7'00			9	-53° 0'45	-8° 0'51			9	-42° 5'89	-6° 3'82		
9	+49° 2'16	+32° 5'74			9	+61° 0'53	+49° 1'73			9	-52° 7'99	-28° 2'22			10	-42° 2'44	-14° 4'78		
9	+49° 5'86	+4° 8'65			11	+61° 4'84	+50° 9'04			10	-52° 4'36	-16° 8'68			11	-42° 1'54	-27° 0'62		
11	+49° 6'95	+39° 2'20			10	+61° 7'68	+21° 5'75			32	-52° 4'25	-35° 3'15	65	826	10	-42° 0'04	-14° 4'57		
10	+49° 7'17	+44° 6'76			9	+61° 7'80	+27° 2'25			9	-52° 1'43	-56° 5'86			11	-41° 8'70	-7° 5'18		
	691					751					811					871			
9	+49° 8'80	+52° 5'40			20	+61° 9'86	+36° 4'98	64	823	11	-52° 0'80	-38° 7'77			10	-41° 8'36	-12° 3'98		
9	+49° 9'94	+9° 2'31			9	+62° 0'03	+30° 1'26			9	-52° 0'04	-2° 2'95			9	-41° 6'77	-13° 2'69		
20	+50° 5'11	+8° 7'30	64	818	9	+62° 6'24	+2° 2'14			26	-51° 9'58	-55° 0'04	65	825	9	-41° 6'70	-54° 6'83		
11	+50° 6'16	+36° 8'42		9'4	10	+62° 8'12	+59° 3'84			9	-51° 8'83	-36° 0'02			18	-41° 4'50	-51° 0'23	65	830
9	+50° 8'42	+58° 3'45			9	+63° 0'96	+1° 6'96			9	-51° 7'67	-22° 6'94			11	-41° 2'99	-50° 6'23		9'5
14	+51° 2'28	+31° 4'01			16	+63° 1'61	+36° 7'42	64	824	9	-51° 5'95	-33° 7'83			9	-41° 2'02	-56° 3'34		
9	+51° 2'83	+32° 8'68			9	+63° 3'13	+34° 2'46			9	-51° 5'56	-29° 2'44			9	-41° 0'60	-56° 3'16		
10	+51° 3'04	+18° 2'60			9	+63° 6'78	+23° 9'94			9	-51° 3'45	-52° 1'10			12	-41° 0'65	-18° 5'78		
34	51° 3'28	12° 6'09	64	820	9	+63° 8'59	+27° 4'23			10	-50° 7'44	-54° 1'43			10	-40° 9'36	-31° 5'33		
10	+51° 3'65	+27° 8'03		8'3	9	+63° 9'30	+45° 3'49			10	-50° 2'70	-49° 5'98			10	-40° 6'61	-5° 5'63		
	701					761					821					881			
10	+51° 4'64	+23° 3'09			10	+64° 1'98	+43° 4'61			11	-49° 8'95	-9° 6'69			9	-40° 4'35	-54° 4'80		
9	+51° 6'10	+46° 9'97			9	+64° 5'87	+37° 1'61			12	-49° 7'90	-11° 0'74			9	-40° 4'17	-9° 3'95		
9	+52° 2'83	+7° 0'88			9	+64° 8'89	+27° 2'69			13	-49° 7'74	-40° 0'99			11	-40° 3'57	-25° 2'34		
56	+52° 3'40	+54° 5'75	64	819	21	+65° 0'00	+27° 3'23	64	825	9	-49° 7'11	-33° 0'43			13	-40° 3'38	-44° 3'02		
18	+52° 4'46	+16° 5'02	64	821	16	-64° 9'48	-6° 1'63	65	822	9	-49° 5'07	-34° 3'65			9	-40° 0'90	-18° 6'30		
13	+52° 4'85	+63° 6'09			9	-64° 5'89	-12° 9'70			72	-49° 4'28	-57° 7'39	65	827	9	-39° 9'17	-13° 9'78		
9	+52° 8'06	+54° 4'04			9	-64° 4'77	-22° 9'97			9	-49° 1'66	-34° 2'35			10	-39° 8'41	-13° 9'34		
10	+52° 8'20	+16° 1'94			12	-63° 4'88	-43° 9'88			15	-49° 1'31	-49° 7'65			9	-39° 7'64	-30° 3'77		
9	+52° 8'29	+56° 5'94			11	-62° 6'70	-37° 0'11			9	-48° 9'73	-64° 7'51			9	-39° 5'79	-40° 5'29		
9	+52° 8'86	+16° 1'27			11	-62° 4'53	-15° 1'78			9	-48° 8'65	-13° 1'70			16	-39° 5'23	-2° 7'32	64	761

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	891,					951,					1011,					1071,			
13	-39°380	-44°128			9	-30°572	-52°223			18	-22°254	-1°237	64 778	9°5	16	-10°872	-28°393	65 840	9°7
9	-39°108	-8°503			11	-30°160	-10°858			9	-21°979	-20°304			9	-10°805	-7°472		
9	-38°993	-42°471			13	-29°957	-47°533			9	-21°523	-30°813			9	-10°405	-38°365		
11	-38°942	-12°474			9	-29°820	-40°855			10	-21°350	-10°088			11	-10°361	-6°466		
11	-38°901	-14°843			10	-29°541	-27°716			9	-21°327	-9°679			10	-10°017	-43°948		
11	-38°542	-25°646			20	-29°369	-33°588	65 835	9°4	13	-21°160	-16°958			9	-9°814	-21°332		
9	-38°484	-22°417			12	-29°118	-64°044			9	-20°862	-28°819			12	-9°721	-3°942		
9	-38°396	-8°251			9	-28°898	-45°279			12	-20°757	-21°722			12	-9°701	-37°845		
9	-38°391	-47°946			9	-28°903	-7°288			10	-20°503	-55°454			19	-9°562	-5°262	65 841	9°5
10	-38°240	-36°532			9	-28°809	-44°897			9	-20°290	-24°400			16	-9°493	-43°192		
	901					961					1021					1081			
10	-38°128	-14°783			9	-28°711	-44°283			10	-20°059	-26°545			10	-9°332	-36°713		
11	-37°437	-11°046			9	-28°650	-18°071			9	-20°046	-48°532			9	-9°140	-46°275		
11	-37°283	-33°583			9	-28°597	-5°057			11	-19°896	-14°057			9	-9°030	-20°761		
12	-37°224	-42°874			17	-28°203	-1°934	64 775	9°7	9	-19°435	-24°572			22	-8°992	-33°505	65 842	9°1
9	-36°961	-42°443			28	-28°149	-52°321	65 836	9°1	12	-19°071	-31°314			17	-8°987	-40°572		
11	-36°942	-2°672			9	-28°124	-14°568			9	-18°716	-1°905			9	-8°813	-1°917		
12	-36°834	-33°813			11	-28°064	-52°039			12	-18°583	-29°937			9	-8°248	-1°316		
9	-36°700	-34°277			11	-28°048	-38°008			9	-18°570	-50°127			10	-8°221	-36°096		
9	-36°584	-44°137			9	-27°958	-16°087			9	-18°266	-36°671			11	-7°837	-30°815		
9	-36°560	-48°119			10	-27°934	-20°775			24	-18°114	-57°630	65 839	9°1	9	-7°746	-45°927		
	911					971					1031					1091			
10	-36°498	-12°248			18	-27°823	-58°993	65 837	9°7	9	-17°316	-52°651			38	-7°706	-20°817	65 843	8°7
26	-36°481	-2°212	64 762	9°0	13	-27°669	-40°397			9	-17°028	-6°361			10	-7°432	-29°850		
15	-36°244	-45°042			9	-27°578	-16°701			11	-16°685	-51°630			11	-7°354	-30°511		
12	-36°195	-18°510			12	-27°564	-42°002			9	-16°676	-4°905			11	-6°994	-43°144		
11	-36°146	-7°916			9	-27°541	-21°031			9	-16°488	-0°245			14	-6°471	-18°278		
9	-35°833	-7°487			11	-27°361	-39°829			9	-15°879	-48°285			12	-6°422	-63°507		
12	-35°550	-34°285			10	-27°306	-55°181			11	-15°857	-8°626			11	-5°890	-24°695		
12	-35°379	-29°450			9	-27°130	-13°571			9	-15°232	-63°562			9	-5°883	-40°524		
15	-35°242	-49°367			14	-27°057	-29°328			9	-15°155	-64°880			13	-5°824	-9°676		
9	-34°894	-17°745			10	-26°992	-64°745			16	-15°001	-43°522			13	-5°375	-5°063		
	921					981					1041					1101			
10	-34°767	-4°477			9	-26°757	-7°758			9	-14°374	-48°600			15	-4°902	-43°456		
18	-34°510	-33°809	65 831	9°6	9	-26°746	-60°566			9	-14°356	-50°766			10	-4°709	-10°210		
9	-34°050	-48°763			11	-26°746	-45°441			9	-14°203	-36°833			11	-4°434	-21°965		
9	-33°852	-36°480			16	-26°548	-24°899			9	-14°176	-32°557			12	-4°208	-46°365		
16	-33°705	-26°221	65 832	9°7	9	-26°517	-34°223			9	-14°118	-33°045			18	-4°054	-45°111	65 844	9°7
10	-33°628	-11°828			15	-26°511	-9°993			11	-14°073	-29°232			13	-4°023	-16°521		
9	-33°282	-42°638			9	-26°152	-29°860			9	-13°662	-45°832			9	-3°862	-63°130		
9	-33°219	-51°583			9	-26°120	-29°082			10	-13°563	-49°914			12	-3°422	-44°888		
9	-32°847	-19°641			13	-26°088	-49°543			9	-13°408	-17°432			9	-3°303	-52°585		
19	-32°808	-24°827	65 833	9°7	9	-25°918	-44°175			9	-13°367	-30°661			10	-3°199	-47°020		
	931					991					1051					1111			
9	-32°744	-0°152			11	-25°788	-14°278			30	-13°275	-0°822	64 785	8°9	12	-2°876	-25°784		
19	-32°448	-8°151	65 834	9°3	11	-25°509	-38°907			9	-13°211	-43°956			15	-2°772	-7°704		
9	-32°391	-15°926			16	-25°391	-38°823			10	-13°102	-54°122			11	-2°740	-46°898		
9	-32°348	-22°791			9	-24°442	-37°419			10	-12°859	-58°530			10	-2°113	-26°666		
12	-32°214	-57°823			9	-24°337	-20°072			14	-12°529	-20°539			9	-2°102	-15°189		
11	-32°205	-44°519			9	-24°296	-25°652			10	-12°515	-58°846			10	-1°314	-11°206		
9	-31°956	-35°885			9	-24°278	-54°791			10	-12°333	-11°239			26	-1°175	-34°391	65 845	9°0
10	-31°670	-2°706			15	-24°212	-42°463			12	-12°310	-8°536			10	-1°023	-13°752		
9	-31°558	-9°242			10	-24°073	-57°050			13	-12°212	-58°246			9	-0°923	-44°712		
15	-31°543	-12°602			9	-23°989	-59°653			11	-12°133	-4°291			15	-0°870	-35°503		
	941					1001					1061					1121			
9	-31°405	-25°189			10	-23°728	-8°466			10	-12°026	-40°024			56	-0°752	-38°547	65 846	8°5
9	-31°337	-56°961			11	-23°458	-45°504			9	-12°009	-1°958			11	-0°516	-1°462		
24	-31°192	-1°154	64 772	9°1	9	-23°421	-1°848			11	-11°946	-47°748			10	-0°508	-56°060		
16	-30°991	-9°804			16	-23°145	-25°988			15	-11°638	-28°695			9	-0°356	-40°184		
15	-30°926	-49°382			10	-23°073	-14°579			9	-11°606	-46°382			13	-0°331	-52°321		
10	-30°930	-17°563			20	-22°778	-10°780	65 838	9°4	12	-11°573	-22°868			16	-0°308	-7°434		
10	-30°813	-15°481			10	-22°772	-12°684			9	-11°321	-46°129			10	-0°263	-44°506		
12	-30°771	-27°468			9	-22°494	-40°762			9	-11°235	-19°735			13	+0°023	-63°497		
10	-30°673	-16°353			14	-22°454	-42°450			9	-11°154	-14°025			12	+0°324	-2°676		
10	-30°584	-35°761			10	-22°349	-56°024			10	-10°921	-18°218			12	+0°486	-32°622		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1131					1191					1251					1311			
9	+ 0°491	-26°900			13	+11°112	-46°565			11	+21°953	- 0°564			30	+31°792	-56°643	65° 861	9°1
10	+ 0°578	-58°059			10	+11°425	-40°669			11	+21°959	-39°819			11	+31°827	- 7°545		
12	+ 0°682	-40°696			10	+11°698	-37°171			15	+22°005	-20°656			14	+31°868	-62°685		
9	+ 0°741	-21°863			11	+11°882	-38°469			9	+22°159	-13°102			11	+31°957	-54°833		
10	+ 0°879	-27°324			9	+12°095	-60°267			9	+22°382	-31°436			9	+32°018	-19°847		
11	+ 1°203	-25°422			9	+12°744	-33°285			28	+22°399	- 2°200	64° 807	9°0	9	+32°156	-61°150		
11	+ 1°273	-43°178			15	+12°959	-61°947			16	+22°603	- 2°672			9	+32°429	- 5°820		
9	+ 1°742	-58°700			11	+13°005	-39°481			9	+22°742	-52°747			30	+32°531	- 2°810	64° 811	8°7
10	+ 1°755	- 7°903			9	+13°071	-41°625			9	+22°806	-53°337			9	+33°128	- 0°146		
9	+ 1°841	- 6°841			9	+13°087	-27°880			9	+23°077	-55°066			10	+33°258	-64°474		
	1141					1201					1261					1321			
9	+ 1°968	-32°225			13	+13°129	-25°843			15	+23°429	-23°603			9	+33°457	-11°128		
20	+ 1°999	-45°104	65° 847	9°4	9	+13°375	-13°729			9	+23°548	-27°289			11	+33°557	-53°159		
18	+ 2°122	-48°040	65° 848	9°7	9	+13°733	-42°175			9	+23°594	-30°562			10	+33°573	-27°187		
9	+ 2°180	-64°512			10	+14°156	-36°285			12	+23°865	-21°935			10	+33°722	-43°438		
12	+ 2°205	-14°288			16	+14°511	-60°911			9	+24°208	-28°159			10	+33°813	-12°156		
12	+ 2°618	- 3°852			16	+14°612	-31°520			9	+24°299	- 7°353			9	+33°967	-28°795		
10	+ 2°720	-30°260			9	+14°629	-58°931			11	+24°596	-14°618			11	+34°101	-29°756		
12	+ 2°861	-14°000			9	+14°746	-58°679			18	+24°688	- 9°703	65° 856	9°5	9	+34°146	-62°426		
9	+ 3°154	- 4°195			11	+14°882	-56°885			9	+25°483	-48°173			11	+34°465	- 6°020		
19	+ 3°328	-15°572	65° 849	9°6	20	+15°254	- 1°157	64° 802	9°4	11	+25°685	-13°520			12	+34°672	-19°741		
	1151					1211					1271					1331			
9	+ 3°405	-28°728			9	+15°460	-49°119			13	+26°014	- 0°162			10	+34°982	-12°897		
11	+ 3°692	-55°710			11	+15°679	-52°059			9	+26°586	-48°307			10	+35°518	-12°068		
9	+ 3°919	-37°777			9	+16°075	-14°440			9	+26°662	-25°413			9	+35°552	-53°798		
9	+ 4°597	- 7°143			9	+16°098	-63°357			9	+26°752	-19°912			9	+35°767	-39°359		
11	+ 4°856	-12°404			13	+16°199	-56°437			10	+27°009	-47°501			11	+35°930	- 0°749		
10	+ 5°182	-40°694			11	+16°616	-30°829			10	+27°114	-53°482			12	+36°043	-16°162		
10	+ 5°207	- 2°715			9	+16°648	-47°035			9	+27°117	-12°219			10	+36°170	-38°772		
14	+ 5°390	-59°165			10	+16°653	-55°366			13	+27°318	-17°376			11	+36°311	-17°913		
12	+ 5°572	-45°598			10	+16°706	- 5°653			9	+27°492	-10°076			12	+36°335	-13°600		
9	+ 5°597	-32°845			12	+16°966	-15°458			11	+27°629	-44°783			9	+36°433	-43°578		
	1161					1221					1281					1341			
15	+ 5°880	-44°814			11	+17°050	- 7°188			10	+27°678	-47°917			15	+36°453	-11°216		
10	+ 6°087	-11°222			9	+17°432	-48°279			13	+27°717	-41°374			11	+36°767	-29°687		
10	+ 6°301	- 6°350			18	+17°725	-25°659	65° 854	9°5	9	+27°824	-30°339			16	+36°976	-64°689	65° 862	8°7
9	+ 6°701	-30°863			9	+17°724	- 7°971			9	+28°146	-45°685			15	+36°986	- 2°295		
9	+ 6°704	- 4°728			9	+18°208	-28°786			13	+28°215	-58°828			16	+37°007	-56°802		
17	+ 6°839	- 3°132			11	+18°304	-21°115			14	+28°715	-56°485			12	+37°159	-59°068		
14	+ 6°844	-42°931			9	+18°324	-16°725			9	+28°904	-47°421			11	+37°806	-54°054		
15	+ 7°596	-57°710			9	+18°362	- 8°165			9	+29°014	-14°116			9	+38°112	-39°642		
10	+ 7°781	- 6°367			9	+18°633	-12°726			9	+29°147	-23°431			12	+38°269	-31°161		
22	+ 7°944	-39°513	65° 850	9°4	9	+18°636	-13°271			10	+29°238	-16°557			9	+38°350	- 5°948		
	1171					1231					1291					1351			
9	+ 7°988	-30°583			9	+19°312	-47°039			9	+29°355	-45°863			11	+38°395	- 6°947		
9	+ 8°138	-25°622			9	+19°470	-20°671			42	+29°384	-44°854	65° 858	8°3	9	+38°884	-27°992		
16	+ 8°140	- 3°022			9	+19°571	-58°086			12	+29°517	-10°988			12	+38°919	-11°850		
11	+ 8°303	-27°863			11	+19°733	-15°054			12	+29°539	-22°133			11	+39°159	-61°134		
13	+ 8°675	-31°605			9	+19°936	-30°687			10	+29°596	-23°461			12	+39°851	-18°657		
11	+ 8°768	-21°716			10	+19°980	-10°862			36	+29°618	-18°898	65° 857	8°6	9	+39°870	-41°352		
13	+ 8°900	-42°430			10	+20°040	- 8°475			9	+29°889	-38°203			13	+40°483	-43°720		
10	+ 8°928	-23°604			11	+20°187	- 6°358			9	+29°966	-45°666			9	+40°771	-11°426		
9	+ 8°983	-43°246			9	+20°464	- 9°483			9	+30°244	-36°661			9	+41°318	-49°063		
15	+ 9°366	-36°169			11	+20°572	- 1°180			9	+30°675	- 7°067			9	+41°400	- 4°775		
	1181					1241					1301					1361			
11	+ 9°605	- 9°243			15	+20°693	-18°668			9	+30°688	-49°916			9	+41°741	-44°828		
22	+ 9°694	-42°340	65° 851	9°4	11	+20°963	-36°620			9	+30°721	-33°025			13	+42°074	-42°354		
11	+ 9°861	-49°189			9	+21°121	- 3°304			9	+30°762	-27°232			15	+42°299	-11°139		
34	+ 9°888	-53°871	65° 852	9°0	16	+21°155	-58°713	65° 855	9°6	10	+30°824	-42°716			11	+42°411	-21°521		
12	+ 9°922	-36°923			13	+21°162	-19°955			9	+30°858	-58°111			12	+42°579	-43°109		
12	+10°007	-53°480			10	+21°278	-63°024			18	+30°853	-34°018	65° 860	9°5	10	+42°716	- 2°213		
10	+10°331	-26°821			16	+21°671	-38°257			9	+30°978	-52°719			9	+42°763	-60°928		
11	+10°383	-27°522			9	+21°693	-21°415			18	+31°042	-27°646	65° 859	9°7	11	+43°141	- 7°817		
34	+10°579	- 9°744	65° 853	8°8	9	+21°885	-24°703			9	+31°318	- 6°483			15	+43°602	-46°782		
9	+10°971	-45°369			11	+21°916	-64°632			9	+31°464	-19°122			18	+43°715	-37°404	65° 863	9°6

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
	1371,					1431,								
12	+44.381	-18.058			9	+55.448	-62.077							
9	+44.388	-30.320			10	+55.567	-33.398							
15	+44.450	-20.908			10	+55.654	-22.241							
11	+44.754	-3.881			9	+55.717	-53.193							
12	+45.007	-36.748			18	+55.732	-22.690	65	873	9.1				
9	+45.100	-27.394			11	+55.777	-55.122							
22	+45.136	-46.513	65	865	11	+55.782	-1.920							
18	+45.488	-15.960	65	864	9	+55.942	-49.478							
15	+46.679	-6.637			12	+56.114	-15.961							
10	+46.813	-6.971			11	+56.264	-35.320							
	1381					1441								
12	+47.077	-45.856			10	+56.367	-34.288							
9	+47.266	-36.583			11	+56.371	-11.181							
13	+47.416	-59.540			10	+56.458	-22.288							
18	+47.688	-61.446	65	866	9	+56.987	-34.790							
16	+48.022	-60.946	65	867	10	+57.119	-26.822							
10	+48.020	-4.911			11	+57.424	-0.568							
10	+48.363	-26.933			10	+57.529	-11.012							
9	+48.729	-11.058			17	+57.571	-12.815	65	874	9.7				
10	+48.734	-13.497			10	+57.659	-12.197							
20	+48.935	-53.332	65	868	9	+57.741	-10.445							
	1391					1451								
9	+49.251	-5.514			10	+57.849	-50.193							
9	+49.361	-10.124			12	+58.047	-34.706							
14	+49.391	-50.790			10	+58.208	-43.895							
10	+49.412	-46.052			20	+58.339	-31.936	65	875	9.2				
9	+49.436	-17.750			9	+58.724	-43.199							
12	+49.619	-29.733			10	+58.738	-2.175							
16	+50.251	-37.049			10	+58.995	-28.953							
36	+50.481	-49.141	65	870	9	+59.081	-39.497							
9	+50.610	-48.107			12	+59.901	-51.353							
10	+50.674	-54.851			10	+59.907	-62.239							
	1401					1461								
9	+50.759	-39.593			12	+60.117	-25.870							
9	+50.831	-24.884			40	+60.148	-42.628	65	876	8.6				
9	+50.891	-18.224			20	+60.728	-37.167	65	877	9.4				
9	+50.947	-36.752			11	+61.236	-21.834							
11	+50.964	-57.802			10	+61.326	-1.477							
9	+51.080	-30.720			9	+61.601	-59.603							
24	+51.295	-15.440	65	869	10	+61.821	-21.311							
9	+51.407	-15.423			10	+62.048	-5.932							
18	+51.496	-32.706	65	871	10	+62.251	-37.878							
9	+51.721	-37.585			9	+62.255	-45.431							
	1411					1471								
12	+51.832	-50.833			9	+62.286	-24.234							
11	+51.854	-42.753			10	+62.916	-12.619							
10	+52.408	-54.081			12	+63.464	-49.791							
12	+52.593	-61.768			11	+63.797	-32.038							
9	+52.844	-10.978			9	+64.029	-7.339							
11	+53.060	-2.060			14	+64.417	-51.968							
9	+53.456	-3.333			10	+64.909	-9.822							
9	+53.587	-32.560												
10	+53.686	-18.501												
9	+53.964	-18.288												
	1421													
9	+54.054	-12.241												
9	+54.062	-26.540												
11	+54.268	-61.673												
16	+54.480	-50.049	65	872	9.3									
9	+54.594	-14.246												
15	+54.558	-50.057												
14	+54.740	-50.761												
9	+54.770	-22.648												
18	+54.991	-27.116												
11	+55.262	-46.151												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.					
	111,					171,					231,					291,								
9	+19.781	+7.326			9	+54.697	+49.831	64	869	10.0	11	-19.807	-25.651			9	+23.660	-2.622						
10	+20.439	+49.456	64	851	9.7	9	+55.875	+51.183	64	870	10.0	18	-18.875	-26.153	65	890	9.1	10	+24.610	-8.378	65	912	10.0	
9	+21.624	+21.288			9	+56.205	+33.605	64	872	9.8	19	-18.834	-5.743	65	891	8.9	13	+26.137	-33.347	65	913	9.8		
9	+22.090	+35.508			9	+57.585	+1.578				10	-17.677	-23.022			10	+27.313	-52.434						
20	+22.469	+30.356	64	852	8.5	9	+57.873	+35.760			16	-16.562	-44.524	65	892	9.6	9	+27.488	-57.012					
12	+23.212	+24.128	64	853	9.7	18	+59.599	+22.850	64	874	9.2	10	-16.553	-30.123			9	+28.683	-10.890					
9	+23.443	+37.110			9	+59.899	+34.830	64	873	9.8	9	-16.164	-0.708			9	+30.614	-41.983						
9	+24.128	+37.776			9	+60.148	+10.905	64	875	10.0	13	-16.154	-1.824			20	+30.768	-19.931	65	914	9.1			
9	+24.378	+0.196			9	+61.874	+0.474				16	-16.082	-2.632	64	837	9.4	17	+31.386	-62.316	65	915	9.4		
9	+24.590	+14.104			20	+62.443	+51.894	64	876	8.9	16	-15.894	-13.427	65	893	9.7	11	+31.815	-45.140					
	121					181						241					301							
24	+25.674	+58.690	63	934	8.9	9	+62.511	+49.153	64	877	10.0	10	-15.717	-52.013			18	+32.590	-16.105	65	916	9.4		
9	+26.438	+30.888			40	+62.525	+42.708	64	878	7.2	10	-15.101	-1.012			10	+33.572	-19.925						
9	+26.774	+38.632			9	+63.742	+54.092	64	879	9.9	12	-14.972	-52.259			11	+35.526	-50.904						
20	+27.363	+48.829	64	854	9.0	10	-63.328	-62.423	65	866	9.4	10	-14.859	-10.475			21	+35.760	-22.011	65	917	9.1		
9	+27.686	+42.359			20	-63.082	-16.275	65	869	9.0	9	-14.183	-41.039			10	+36.044	-24.743						
18	+28.149	+56.518	63	937	9.3	9	-63.029	-61.873	65	867	9.7	9	-13.383	-41.144			9	+36.254	-51.451					
9	+28.324	+4.848			10	-62.673	-54.228	65	868	9.5	9	-11.857	-40.363			9	+36.558	-28.395						
12	+28.876	+49.500	64	855	9.6	9	-62.533	-37.887			25	-11.878	-37.408	65	894	8.8	10	+36.857	-26.857					
9	+29.338	+37.598			9	-62.411	-51.654			21	-11.289	-44.097	65	895	8.8	10	+37.257	-27.233						
9	+29.368	+48.420			14	-61.604	-33.467	65	871	9.4	15	-10.764	-58.679	65	896	9.2	18	+37.631	-38.244	65	919	9.2		
	131					191						251					311							
11	+29.879	+46.212	64	856	9.7	20	-61.430	-49.961	65	870	8.9	9	-9.762	-35.749			9	+37.832	-6.332					
14	+30.296	+14.884	64	858	9.5	11	-58.535	-27.638			9	-8.825	-18.676			21	+38.179	-10.391	65	918	9.0			
10	+30.355	+51.706	64	857	10.0	19	-58.122	-23.175	65	873	9.1	15	-7.767	-58.787			11	+38.610	-24.019					
9	+30.470	+8.412			13	-57.377	-50.546	65	872	9.3	17	-7.712	-58.785	65	897	9.1	32	+38.658	-13.071	65	920	8.1		
9	+30.932	+2.915			11	-57.288	-50.538			9	-7.124	-54.574			9	+38.902	-47.186	65	921	9.9				
10	+31.287	+13.191	64	859	10.0	14	-57.014	-13.191	65	874	9.7	10	-6.134	-25.935			21	+38.960	-48.232	65	922	8.8		
9	+33.136	+41.059			18	-54.866	-32.193	65	875	9.2	10	-4.382	-16.243	65	898	9.7	9	+40.843	-54.160					
9	+34.582	+0.974			9	-53.520	-26.030			9	-4.311	-16.197					12	+41.566	-44.464	65	923	9.7		
9	+34.768	+27.952			9	-52.704	-21.918			9	-3.228	-32.452			9	+42.337	-23.248							
9	+35.206	+28.723			24	-52.270	-42.745	65	876	8.6	13	-2.806	-42.435	65	899	9.7	9	+42.395	-13.727					
	141					201						261					321							
9	+35.790	+13.720			14	-52.086	-37.264	65	877	9.4	10	+0.859	-54.969			9	+44.843	-46.954						
13	+36.197	+55.568	63	943	9.6	10	-49.877	-6.457			10	+0.995	-18.965			9	+45.878	-8.362						
9	+36.787	+46.116			9	-49.429	-31.890			9	+1.742	-14.382			24	+47.704	-30.568	65	924	9.1				
19	+36.859	+60.018	63	945	9.2	9	-48.466	-49.633			16	+1.867	-18.542	65	900	9.5	10	+48.819	-20.651					
17	+36.995	+37.953	64	860	9.3	10	-47.338	-51.730			10	+2.275	-7.836			9	+49.554	-18.908						
9	+38.684	+18.295			9	-45.257	-25.834			11	+5.317	-47.799			11	+50.046	-43.785	65	927	10.0				
9	+39.341	+43.910			9	-45.147	-6.891			10	+5.822	-62.539	65	902	9.7	17	+50.123	-15.271	65	926	9.5			
14	+39.819	+58.784	63	949	9.2	9	-43.122	-58.470			12	+5.932	-32.984	65	901	9.7	15	+50.374	-7.776	65	925	9.8		
12	+40.502	+51.534	64	861	9.6	10	-41.450	-34.817			24	+7.142	-21.317	65	903	8.8	10	+50.609	-47.592					
18	+40.520	+21.431	64	863	9.2	16	-40.360	-31.444	65	878	9.4	18	+7.147	-44.045	65	904	9.4	10	+51.389	-37.721				
	151					211						271					331							
9	+40.930	+51.262	64	862	10.0	18	-39.350	-12.357	65	879	9.3	11	+8.745	-21.190			11	+51.432	-14.803					
9	+41.060	+9.434			14	-38.248	-41.068	65	880	9.4	9	+8.829	-2.636			9	+51.985	-34.326						
9	+42.041	+34.127			10	-36.176	-40.630			10	+9.600	-17.551			10	+52.275	-32.050							
9	+42.495	+30.584			9	-35.587	-39.369			10	+10.408	-36.645			9	+52.473	-25.21							
10	+43.171	+14.667			9	-35.493	-41.096			22	+11.110	-18.131	65	905	8.7									

8h 33m, - 65°

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	171,					231,					291,					351,							
9	+18°836	+17°777			9	+57°936	+50°742			9	-32°836	-40°588			9	-1°851	-44°761						
9	+20°181	+41°904			24	+58°035	+24°902	64	933	8°4	9	-32°270	-60°194		9	-0°745	-10°970						
9	+22°046	+32°896			9	+59°503	+8°855			10	-30°846	-53°950			11	+0°343	-60°727						
9	+22°889	+53°006			9	+60°651	+30°200			10	-30°409	-55°080	65	954	10°0	9	+2°682	-10°977					
9	+23°217	+24°216			9	+60°768	+16°257			9	-29°720	-10°189			18	+2°835	-41°875	65	975	9°2			
12	+24°581	+39°592	64	923	9°6	10	+61°336	+3°716			11	-29°076	-20°311			10	+4°865	-11°305					
16	+24°947	+54°984	64	924	9°3	9	+61°544	+22°002			9	-28°825	-3°024			9	+4°920	-48°129					
9	+25°159	+53°418			10	+63°088	+23°958			10	-28°443	-30°524			12	+5°235	-30°823	65	976	10°0			
9	+27°032	+52°750			9	+64°249	+59°858			9	-27°493	-41°997			9	+6°252	-52°619						
9	+27°876	+64°172			15	-64°507	-7°932	65	925	9°8	9	-26°145	-53°184		9	+6°634	-25°748						
	181					241					301					361							
9	+28°132	+6°958			14	-64°229	-15°428	65	926	9°5	10	-25°812	-35°233		28	+8°662	-61°466	65	977	8°2			
9	+29°903	+13°368			12	-62°949	-14°872			9	-25°737	-40°429			13	+11°236	-40°511	65	978	10°0			
9	+30°111	+25°529			10	-62°268	-43°879	65	927	10°0	9	-25°376	-47°104		9	+11°426	-60°251						
34	+30°465	+23°166	64	925	8°1	9	-61°440	-47°641			20	-25°356	-2°042	64	900	9°1	9	+12°803	-23°693				
11	+31°444	+58°580			9	-61°383	-37°740			17	-25°232	-44°788	65	955	9°4	9	+13°110	-58°257					
9	+31°513	+30°398			9	-61°327	-38°076			10	-24°388	-26°081			20	+13°263	-12°132	65	979	9°2			
11	+31°651	+62°895	63	1016	10°0	11	-60°925	-3°523	64	871	10°0	19	-22°750	-16°089	65	956	9°2	16	+13°417	-38°213	65	980	9°5
9	+32°171	+53°997			9	-60°879	-23°250			15	-21°423	-63°724	65	957	9°4	9	+13°952	-24°241					
9	+32°210	+30°262			9	-60°878	-32°011			9	-21°169	-11°072			11	+14°699	-14°428						
9	+33°224	+46°844			9	-60°636	-24°268			9	-20°861	-27°828			19	+15°238	-15°965	65	981	9°1			
	191					251					311					371							
9	+33°505	+23°934			15	-59°557	-31°863	65	928	9°5	10	-20°725	-35°410		9	+16°416	-13°822						
9	+34°070	+36°453			17	-59°267	-15°897	65	929	9°3	24	-19°899	-20°358	65	958	8°8	9	+17°340	-57°871				
11	+35°855	+33°554	64	926	10°0	9	-56°773	-54°429			9	-19°427	-53°198			12	+17°890	-26°701					
9	+36°241	+43°386			9	-55°816	-49°114			18	-18°519	-11°159	65	959	7°1	10	+18°341	-44°175					
9	+36°747	+28°421			11	-53°707	-40°347	65	930	10°0	9	-18°233	-29°113		11	+18°835	-27°799						
9	+37°053	+42°638			9	-53°288	-38°725			9	-18°143	-34°721			10	+19°120	-9°100	65	982	10°0			
26	+37°892	+81°097	64	927	8°0	10	-52°413	-41°034	65	932	10°0	11	-18°136	-53°453		9	+19°201	-34°031					
9	+37°951	+23°780			13	-52°045	-57°883	65	931	9°3	25	-17°692	-21°984	65	960	8°4	9	+19°421	-35°823				
9	+38°877	+24°210			56	-51°845	-49°600	65	933	5°7	9	-17°087	-36°046		11	+21°624	-0°693						
11	+39°275	+55°239	63	1021	9°8	18	-50°996	-17°114	65	937	9°5	9	-16°872	-49°036		9	+22°452	-40°534					
	201					261					321					381							
19	+39°992	+33°790	64	928	8°9	9	-50°995	-64°395	65	934	10°0	13	-15°898	-27°671	65	961	10°0	9	+23°051	-23°190			
9	+41°349	+28°055			12	-50°651	-30°363	65	936	10°0	9	-15°294	-36°642		11	+23°371	-58°057						
14	+42°090	+61°958	63	1022	9°4	10	-50°596	-2°235			18	-14°550	-25°157	65	962	8°9	15	+24°197	-48°344	65	983	9°9	
9	+42°478	+17°828			9	-50°466	-3°049			21	-13°703	-19°954	65	963	8°7	9	+24°648	-50°251					
30	+43°077	+61°608	63	1023	7°4	10	-50°447	-40°728	65	935	9°9	10	-13°422	-61°286	65	964	10°0	9	+24°934	-3°036			
20	+43°367	+45°324	64	929	9°1	16	-49°379	-38°963	65	938	9°4	9	-13°331	-14°997		14	+25°402	-28°473	65	984	10°0		
10	+43°996	+29°156			10	-49°237	-40°620			12	-13°040	-38°168	65	965	10°0	9	+25°487	-60°363					
15	+44°834	+6°791	64	930	10°0	18	-48°006	-55°736	65	939	8°9	9	-12°534	-31°474		11	+26°822	-13°442					
9	+45°612	+10°476			18	-47°799	-11°652	65	940	9°2	14	-12°398	-7°652	65	966	9°8	9	+26°834	-25°976				
10	+45°867	+21°745			10	-46°494	-2°294			16	-11°872	-30°301	65	967	9°3	14	+27°198	-51°351	65	986	9°9		
	211					271					331					391							
9	+46°614	+29°375			18	-46°239	-41°250	65	941	9°3	11	-11°573	-17°082	65	968	10°0	18	+27°309	-10°315	65	985	9°6	
9	+48°760	+41°482			13	-46°094	-16°849	65	943	10°0	22	-10°770	-15°089	65	969	9°1	24	+29°183	-51°977	65	987	8°9	
9	+48°851	+18°109			20	-45°843	-41°472	65	942	9°2	16	-10°546	-47°026	65	970	9°5	9	+29°477	-28°127				
9	+48°910	+18°048			10	-45°051	-11°016			17	-8°093	-25°175	65	971	9°2	10	+29°561	-28°481					
9	+49°580	+48°580			9	-44°382	-4°906			9	-7°757	-36°416			9	+29°561	-24°074						
9	+50°246	+51°217			20	-44°162	-41°873	65	944	9°1	11	-7°440	-13°853			9	+31°123	-55°555					
32	+51°118	+6°674	64	931	8°2	15	-43°705	-7°238	65	945	9°7	9	-6°739	-25°321		11	+31°202	-30°942					
9	+51°853	+25°103			9	-43°385	-20°699			10	-6°444	-34°503			10	+31°262	-62°595						
10	+51°987	+35°840			18	-41°375	-47°565	65	946	9°4	9	-6°324	-53°399		10	+31°476	-36°164						
9	+52°372	+16°887			9	-41°106	-19°203			9	-6°298	-31°504			11	+31°714	-38°906						
	221					281					341					401							
9	+52°770	+5°528			17	-40°716	-25°180	65	948	9°4	9	-5°919	-63°240		10	+32°015	-48°194						
9	+54°154	+6°942			15	-40°641	-12°787	65	949	10°0	10	-5°572	-56°971	65	972	10°0	9	+32°027	-30°146				
14	+55°313	+37°579	64	932	9°4	11	-40°393	-58°180	65	947	9°6	9	-4°883	-28°415		9	+32°266	-9°066					
9	+55°465	+3°716			9	-38°191	-8°775			9	-4°845	-43°179			14	+32°823	-47°688	65	988	10°0			
9	+56°281	+2°886			10	-37°136	-56°465	65	950	9°8	9	-4°822	-18°713		11	+33°442	-8°						

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.			
9	411				11	471			PLATE CENTRE.					9	51				
14	+36.014	-57.909			10	+62.217	-21.149			8h 51m, - 65°.					9	-28.989	+25.638		
14	+36.358	-37.001	65	991	10.0	+62.801	-47.455			Plate 223. 1892, March 26.					9	-28.762	+31.723		
14	+36.957	-10.818	65	990	9.7	+63.787	-29.357	65	1013	6.5	PROVISIONAL CONSTANTS.					9	-28.729	+14.756	
15	+37.285	-33.341	65	992	10.0	+63.953	-31.683				a = - .01155 d = + .00124					9	-26.490	+29.206	
11	+37.461	-27.221			10	+64.544	-15.196				b = - .00127 e = - .01145					9	-25.553	+3.698	
12	+37.666	-59.772	65	994	10.0	+64.687	-25.864				c = - .0454 f = - .1719					9	-25.354	+45.166	
13	+38.028	-35.099	65	993	10.0	+64.884	-21.344	65	1014	8.5	To obtain standard co-ordinates, ξ, η					9	-25.393	+37.055	
11	+38.876	-62.810	65	997	10.0						$\xi = x + ax + by + c$					18	-25.123	+9.919	64 947 8.9
10	+39.387	-14.719									$\eta = y + dx + ey + f$					9	-25.102	+10.210	
19	+39.878	-19.693	65	995	8.7									9	-24.283	+27.416			
20	421													61					
12	+39.886	-51.568	65	998	9.1					28	-64.849	+6.369	64 931	8.2	10	-23.773	+41.033		
9	+39.940	-17.928	65	996	10.0					13	-62.917	+62.929	63 1026	9.2	9	-23.767	+26.580		
9	+40.224	-58.627								11	-62.790	+37.499	64 932	9.4	9	-23.503	+43.465		
10	+40.347	-64.541	65	1001	8.8					9	-60.876	+16.605			14	-23.477	+2.284		
9	+40.793	-45.278	65	1000	9.3					9	-60.293	+3.717			9	-23.411	+53.910		
9	+41.042	-2.227								24	-59.214	+25.032	64 933	8.4	9	-23.370	+2.496	64 948 9.7	
14	+41.281	-8.194	65	999	10.0					9	-58.823	+12.378			20	-23.030	+2.550	64 949 8.9	
17	+41.559	-27.955	65	1002	9.4					9	-56.613	+9.120			9	-22.761	+33.015		
9	+42.469	-5.849								9	-55.466	+60.363			9	-22.421	+34.906		
9	+42.524	-34.050								9	-54.437	+4.134			17	-22.358	+14.560	64 950 9.4	
10	431									11					71				
14	+42.723	-11.375								9	-54.099	+24.442			28	-22.020	+34.982	64 951 8.1	
9	+42.872	-30.437								9	-50.351	+11.534			9	-21.453	+27.289		
9	+43.175	-28.503								9	-49.973	+51.799			9	-21.224	+50.868		
10	+43.262	-44.331								9	-49.417	+27.283			24	-20.943	+55.044	64 952 8.5	
15	+43.666	-26.593	65	1003	9.1					9	-48.398	+15.014			9	-20.409	+9.063		
10	+43.719	-22.115								9	-47.572	+34.031			10	-19.659	+30.488		
18	+44.004	-55.541	65	1004	9.2					14	-47.187	+48.708	64 935	10.0	20	-19.108	+38.129	64 953 9.1	
11	+44.420	-49.246	65	1005	10.0					22	-46.456	+10.761	64 934	8.7	9	-18.967	+37.704		
9	+44.864	-42.430								9	-45.842	+21.536			9	-18.796	+14.420		
15	+45.015	-56.504	65	1006	9.6					14	-45.636	+23.585	64 936	9.7	9	-18.738	+35.035		
9	441									21					81				
9	+45.127	-28.590								9	-45.471	+4.218			9	-18.578	+3.016		
10	+45.456	-49.784								9	-45.125	+46.648			9	-17.217	+50.520		
9	+45.612	-10.499								14	-44.865	+22.410	64 938	9.6	18	-16.447	+16.509	64 954 9.1	
9	+45.788	-9.518								11	-44.738	+41.840	64 939	9.7	16	-15.694	+19.563	64 955 9.5	
9	+45.804	-8.124								9	-44.723	+31.720			9	-14.952	+45.016		
9	+46.206	-49.342								10	-44.488	+1.995	64 937	9.8	10	-14.951	+35.820		
9	+46.713	-22.369								13	-42.541	+20.021	64 940	9.6	15	-14.668	+54.954	64 956 10.0	
9	+46.845	-18.954								9	-42.280	+50.835			22	-13.754	+36.895	64 957 8.7	
9	+47.534	-2.649								9	-41.651	+26.248			9	-13.323	+53.368		
14	+49.155	-24.407	65	1007	10.0					9	-41.130	+11.461			9	-13.141	+13.655		
9	451									31					91				
9	+49.263	-27.162								9	-41.116	+41.487			9	-13.108	+13.863		
9	+49.293	-14.267								9	-40.138	+23.411			9	-12.899	+39.904		
9	+49.551	-15.817								10	-39.934	+17.046			9	-11.428	+55.283		
10	+49.556	-19.949								9	-37.824	+42.741			34	-11.135	+19.575	64 958 8.1	
10	+49.704	-42.859								9	-37.779	+48.854			9	-11.118	+60.571		
9	+50.440	-8.058								10	-37.227	+8.075			20	-9.396	+43.976	64 959 9.1	
10	+50.984	-7.475								20	-35.918	+7.220	64 941	9.2	17	-8.878	+24.891	64 960 9.5	
24	+51.229	-33.010	65	1008	8.0					9	-35.737	+13.643			9	-8.097	+18.353		
16	+51.531	-25.237	65	1009	9.7					30	-34.854	+25.776	64 942	8.3	10	-7.574	+48.044		
9	+52.192	-42.638								9	-34.452	+63.984			18	-7.448	+63.317	63 1053 9.2	
10	461									41					101				
9	+52.930	-44.785								12	-34.267	+54.202	64 943	9.8	15	-7.176	+9.330	64 961 9.6	
9	+53.850	-54.990								9	-34.087	+20.096			10	-6.994	+53.189		
9	+54.530	-44.757								9	-33.623	+29.959			9	-6.744	+60.340		
9	+55.146	-59.658								13	-32.313	+26.474	64 944	10.0	9	-6.388	+15.161		
9	+57.965	-1.965								12	-32.266	+52.008	64 945	10.0	9	-6.156	+46.712		
10	+58.455	-4.460								9	-31.693	+64.735			10	-5.162	+52.083		
9	+58.821	-43.368								9	-30.183	+50.050			9	-4.810	+44.952		
16	+60.028	-16.832	65	1010	9.4					9	-29.826	+41.049			14	-4.770	+7.962	64 962 10.0	
14	+61.637	-39.000	65	1011	9.6					9	-29.571	+20.672			9	-4.098	+1.240		
11	+62.091	-51.083	65	1012	10.0					9	-29.559	+61.387			10	-2.398	+26.584		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	111,					171,					231,					291,				
9	- 2°15'	+ 2°15'			12	+31°174	+62°598	63	1073	9.5	15	-40°220	-48°214	65	1020	9.5	9	-14°074	-57°192	
24	- 1°21'	-38°000	64	993	8.6	20	+81 508	+ 6°215	64	976	8.9	11	-40°180	-24°677		10	-13°641	-25°633		
9	- 1°22'	+22°157			9	+31°693	+32°373				21	-40°104	-61°410	65	1019	8.9	9	-13°520	- 3°035	
10	+ 0°49'	+25°818			9	+33°807	+40°280				12	-37°885	-55°688	65	1021	9.5	10	-13°415	-64°782	
9	+ 0°78'	+16°601			9	+35°873	+ 5°141				12	-37°838	-41°255	65	1022	10.0	9	-13°411	-26°403	
9	+ 0°89'	+30°778			14	+36°323	+52°700	64	977	9.8	17	-37°160	-43°382	65	1023	9.4	9	-13°400	-55°793	
9	+ 0°97'	+ 5°902			28	+89 264	+29 281	64	979	8.6	14	-35°784	-45°917	65	1024	9.6	9	-12°961	-61°787	
10	+ 1°40'	+12°090			35	+39°513	+51°832	64	978	7.3	10	-35°351	-39°938	65	1025	9.5	13	-12°656	-31°833	
10	+ 1°45'	+53°303	64	965	9.6	9	+39°615	+23°720			9	-34°887	-44°264		12	-12°590	-41°146	65	1037	
9	+ 2°01'	+21°754			9	+40°833	+12°339				12	-34°210	-20°043		11	-12°574	- 9°333	10.0		
	121					181						241				301				
12	+ 2°178	+55°881	63	1058	10.0	9	+43°371	+21°531			9	-34°176	-23°180		11	-11°908	- 2°606			
9	+ 2°318	+15°024			9	+46°062	+30°045				9	-33°350	-34°657		9	-11°903	-20°415			
9	+ 3°507	+50°605			9	+46°774	+33°588				9	-32°688	- 6°565		9	-11°412	-36°984			
10	+ 5°297	+47°330			12	+48°190	+29°280	64	980	10.0	9	-32°031	- 2°443		12	-11°352	-55°991	65	1038	
9	+ 6°521	+22°173			9	+48°485	+53°312				9	-31°890	-25°149		12	-10°993	-18°231	10.0		
9	+ 7°052	+39°186			9	+48°780	+15°436				10	-31°488	- 2°652		23	-10°895	-24°393	65	1039	
10	+ 7°090	+34°550			16	+50°609	+ 1°579	64	982	9.8	9	-31°352	-24°902		22	-10°218	-14°529	65	1040	
9	+ 7°750	+22°011			12	+51°021	+18°384	64	981	10.0	9	-30°933	-59°234		9	-10°203	-32°715			
9	+ 7°832	+15°251			9	+55°114	+ 3°041				9	-30°064	- 7°833		9	- 9°873	-26°332			
9	+ 8°424	+42°528			9	+55°480	+45°375	64	983	10.0	10	-29°785	- 5°325		9	- 9°208	-44°079			
	131					191						251				311				
9	+ 8°634	+28°506			24	+55°737	+27°677	64	984	8.3	16	-29°178	-39°880	65	1026	9.6	12	- 8°780	-35°221	
10	+ 8°976	+24°680			9	+55°816	+51°230				9	-28°916	- 9°013		11	- 8°717	-11°562			
9	+ 9°577	+12°118			9	+56°456	+13°518				13	-27°836	-20°131		12	- 8°618	-43°270	65	1041	
9	+10°219	+17°754			9	+56°944	+ 0°443				10	-27°663	-34°975		9	- 8°270	-52°163	10.0		
10	+10°427	+15°359			9	+56°951	+43°634				11	-27°610	-46°234	65	1027	10.0	9	- 8°254	-22°594	
13	+10°541	+18°151	64	967	9.7	9	+59°350	+45°995			9	-27°404	-35°790		9	- 8°212	-49°870			
9	+10°882	+39°597			24	+59°385	+35°111	64	985	8.2	9	-27°263	-28°622		11	- 7°351	-20°138			
10	+11°709	+50°129			12	+60°492	+42°648	64	986	9.7	36	-26°500	- 3°593	64	946	8.1	18	- 6°815	-55°580	
9	+12°095	+25°096			14	+61°974	+27°687	64	988	9.4	9	-26°390	-27°331		12	- 6°663	-49°001	65	1042	
9	+12°109	+22°877			9	+62°265	+38°880	64	987	10.0	9	-25°710	-48°754		11	- 5°952	-40°185	9.3		
	141					201						261				321				
9	+12°200	+13°843			12	+62°579	+ 7°038	64	989	9.4	9	-24°719	-16°390		20	- 4°518	-21°144	65	1043	
12	+12°313	+23°907	64	968	10.0	9	+64°037	+ 5°352			9	-24°444	-18°376		13	- 4°322	-44°472	65	1044	
11	+13°855	+52°902	64	969	10.0	10	-64°039	-24°781	65	1007	10.0	17	-24°206	-14°217	65	1028	10.0			
9	+14°113	+39°923			9	-63°976	- 7°753				9	-22°955	- 1°533		10	- 3°658	- 5°946			
10	+16°204	+24°914			12	-62°210	-25°435	65	1009	9.7	11	-22°422	-43°854		14	- 3°236	-23°418			
9	+16°805	+38°479			36	-61°979	-33°212	65	1008	8.0	9	-22°024	-15°816		11	- 3°183	-13°474			
10	+17°421	+ 6°316			9	-57°413	- 1°763				9	-21°494	-45°629		9	- 3°060	-11°302			
9	+17°443	+46°947			9	-56°744	- 4°236				9	-21°300	-20°002		12	- 1°283	-13°319			
9	+17°823	+15°585			18	-54°306	-16°456	65	1010	9.4	26	-21°218	-11°456	65	1029	8.7	9	- 0°999	-15°898	
9	+18°110	+35°401			11	-51°839	-20°614				9	-21°195	-23°883		9	- 0°782	-37°334			
	151					211						271				331				
9	+18°388	+13°017			12	-51°176	-38°464	65	1011	9.6	9	-21°119	-21°333		17	- 0°194	- 0°977	64	964	
9	+18°431	+03°446			10	-49°923	-14°505				9	-20°230	-52°418		9	- 0°164	- 9°463			
9	+19°009	+ 1°621			10	-49°880	-50°484	65	1012	10.0	9	-20°096	- 3°178		9	+ 1°294	-59°552			
12	+20°397	+ 5°096	64	970	10.0	60	-49°702	-28°695	65	1013	6.5	9	-19°633	- 9°395		9	+ 1°725	-31°025		
9	+20°688	+52°124			9	-49°440	-46°821				9	-19°460	-32°975		18	+ 2°112	- 5°280	64	966	
12	+21°466	+63°958	63	1068	9.8	9	-49°388	-31°003			16	-19°379	-17°961	65	1030	10.0	15	+ 2°786	-46°194	
22	+22°281	+43°930	64	971	8.8	36	-49°173	-20°629	65	1014	8.5	11	-19°359	-19°530	65	1031	10.0	9	+ 5°218	-32°681
9	+22°509	+ 6°567			10	-49°053	-25°141				16	-18°846	-32°431	65	1032	9.6	10	+ 5°356	-15°097	
9	+22°934	+16°765			9	-47°167	-47°206				12	-18°691	-18°316		10	+ 5°680	-26°406			
9	+23°350	+11°179			11	-46°821	- 1°156				23	-18°287	-44°250	65	1033	9.1	9	+ 8°148	-21°507	
	161					221						281				341				
22	+23°506	+50°442	64	972	8.6	10	-45°195	-29°506			9	-18°192	-48°258		9	+ 8°932	-35°564			
10	+24°051	+20°025			9	-44°213	-33°417				12	-17°031	-48°288	65	1034	10.0	18	+ 9°638	-26°903	
10	+25°077	+ 1°609			12	-43°518	-20°679	65	1016	10.0	11	-16°416	-17°166		21	+ 9°912	-42°804	65	1048	
9	+25°856	+37°364			9	-43°474	-34°855				9	-16°405	- 8°536		9	+11°409	-14°350			
30	+26 421	+22 089	64	974	8.2	23	-43 430	-45 963	65	1015	9.0	11	-15°803	-15°580		9	+11°880	-43°470		
9	+26°949	+30°717			17	-42°716	-39°310	65	1017	9.4	11	-15°653	-44°278		9	+12°475	-10°446			
9	+27°532	+15°854			9	-42°514	-54°6°													

9h 9m, - 65°

40

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	111,					171,					231,					291,				
9	- 8°506	+29°402			9	+20°334	+26°824			10	+45°930	+ 3°476			9	-48°492	-35°231			
10	- 8°044	+21°307			9	+21°211	+37°904			9	+46°182	+49°545			9	-47°892	-31°180			
9	- 7°980	+48°178			28	+22°273	+21°739	64	1017	8°2	9	+47°959	+43°350		17	-47°690	-43°676	65	1068	
9	- 6°500	+23°263			9	+22°334	+29°218			9	+48°262	+ 9°206			9	-47°537	-14°895			
9	- 5°956	+21°025			15	+24°183	+53°348	64	1018	9°5	9	+49°455	+11°346		14	-47°019	-12°352			
9	- 5°880	+15°816			9	+24°423	+42°554			9	+49°736	+45°328			9	-46°859	-20°462			
9	- 2°527	+49°102			9	+24°833	+32°497			9	+49°804	+13°604			15	-46°772	-36°966	65	1069	
9	- 2°448	+40°337			9	+25°527	+48°836			12	+50°343	+ 0°554			9	-46°164	-53°921			
9	- 2°242	+62°251			9	+25°567	+ 3°543			9	+50°529	+24°808			9	-45°502	-23°839			
9	- 2°122	+56°971			9	+25°894	+16°939			9	+51°300	+62°529			9	-43°270	-24°146			
	121					181					241					301				
9	- 2°010	+48°663			9	+26°392	+ 7°601			9	+51°936	+50°572			23	-43°228	-31°529	65	1070	
9	- 1°076	+42°408			9	+26°403	+40°415			9	+52°338	+33°106			10	-42°748	-29°635			
9	- 0°622	+16°647			9	+26°455	+ 6°012			10	+52°884	+41°341			16	-42°717	-15°227			
9	- 0°582	+ 0°884			9	+27°138	+17°557			9	+53°104	+39°949			9	-42°403	- 6°469			
9	- 0°224	+13°640			9	+27°743	+ 1°363			9	+53°694	+30°975			9	-42°247	- 7°943			
9	+ 0°101	+20°499			9	+27°824	+32°655			9	+54°055	+27°506			12	-42°228	-61°664	65	1071	
9	+ 0°555	+24°303			9	+27°836	+36°476			9	+54°124	+14°638			9	-41°794	-40°932			
9	+ 0°845	+28°092			9	+27°982	+18°285			9	+54°967	+ 8°625			11	-41°274	-42°582			
9	+ 1°636	+36°060			10	+28°087	+24°709			9	+55°145	+53°488			10	-41°098	-16°968			
9	+ 2°210	+18°276			9	+28°992	+ 7°779			15	+55°583	+11°647			9	-39°769	-16°646			
18	+ 2°250	+48°310	64	1009	9°2		191				251					311				
9	+ 2°590	+17°345			9	+29°542	+15°467			9	+56°364	+ 3°238			9	-39°456	-41°458			
17	+ 4°028	+33°955	64	1010	9°3	9	+29°560	+17°316			9	+56°773	+11°550		18	-38°026	-27°947	65	1074	
10	+ 5°580	+26°910			9	+29°729	+46°009			9	+57°525	+11°639			9	-37°560	-11°969			
40	+ 6°089	+13°256	64	1011	8°2	9	+30°133	+11°799			9	+57°768	+ 3°517		13	-37°284	- 6°529			
					9	+30°163	+32°684			9	+57°858	+ 6°555			10	-37°162	-18°240			
9	+ 6°179	+17°249			15	+30°248	+11°521	64	1019	9°5	10	+58°812	+ 6°722		9	-36°922	-28°382			
9	+ 6°183	+21°681			9	+30°602	+ 6°431			9	+59°396	+54°395			9	-35°451	-18°696			
9	+ 6°740	+17°469			14	+30°828	+ 5°306			11	+59°557	+30°314			9	-35°231	-43°039			
9	+ 7°133	+28°752			9	+30°881	+12°315			9	+60°525	+11°366			15	-35°024	-24°284			
9	+ 9°255	+31°457			9	+32°555	+33°699			9	+61°109	+ 4°323			9	-34°602	-12°297			
	141					201					261					321				
9	+ 9°719	+21°027			9	+32°607	+33°295			9	+61°263	+ 4°168			9	-34°309	-35°400			
15	+ 9°800	+17°567	64	1013	9°5	9	+32°747	+ 1°629			9	+61°315	+22°549		9	-34°239	-30°629			
18	+10°243	+50°931	64	1014	9°4	9	+33°721	+31°899			15	+63°752	+20°989	64	1023	9°5	9	-33°708	-30°697	
9	+10°442	+46°906			9	+33°994	+28°459			9	-64°837	- 2°271			9	-33°680	-37°148			
9	+10°509	+33°471			9	+34°493	+35°285			9	-64°150	- 5°966			9	-33°624	-24°042			
9	+10°781	+26°193			9	+34°679	+18°825			9	-63°915	-52°721			11	-32°955	-42°690			
9	+11°261	+ 3°670			10	+34°946	+54°555			10	-63°725	- 2°543			18	-32°694	-27°937	65	1075	
9	+11°285	+37°458			9	+34°956	+13°267			24	-63°042	-59°298	65	1060	8°0	9	-32°626	-28°863		
9	+11°531	+12°794			9	+35°187	+31°646			9	-61°689	-62°788			10	-32°515	-35°340			
9	+11°701	+64°024			9	+35°322	+19°036			12	-61°387	-28°755	65	1061	10°0	12	-32°140	-45°238		
	151					211					271					331				
15	+11°797	+ 6°978	64	1015	9°5	9	+36°898	+10°148			10	-60°310	- 0°866		10	-30°694	- 4°551			
9	+12°039	+20°844			9	+37°270	+ 1°337			10	-58°275	-37°052			10	-30°263	-49°972			
9	+12°157	+28°370			9	+37°328	+37°125			9	-56°620	-15°301			9	-29°484	-17°291			
9	+12°367	+32°635			9	+38°655	+12°796			10	-56°191	-15°745			9	-28°994	-31°737			
10	+13°119	+ 0°924			9	+38°731	+21°538			11	-55°994	-45°916	65	1062	10°0	16	-28°835	- 9°985		
9	+15°170	+ 0°775			14	+39°314	+44°838	64	1020	9°3	10	-54°220	-37°806		9	-28°729	-61°719			
9	+15°246	+37°510			14	+39°456	+ 5°241			9	-53°684	-26°035			9	-28°159	-20°637			
9	+15°397	+24°427			9	+39°603	+45°869			11	-52°903	- 6°950			18	-27°544	-28°557	65	1076	
9	+16°307	+22°158			9	+40°280	+52°618			10	-52°478	-35°312			9	-27°520	-27°089			
10	+16°532	+30°699			10	+40°874	+ 1°310			9	-52°346	-11°669			14	-26°542	-29°269			
	161					221					281					341				
9	+16°785	+30°921			9	+41°007	+29°692			11	-52°211	-24°404			10	-26°335	-21°627			
9	+17°199	+63°227			9	+42°254	+25°702			12	-52°102	-24°277	65	1064	10°0	9	-26°287	- 5°487		
9	+17°392	+41°388			9	+42°469	+10°965			9	-51°651	-55°755			9	-25°747	-34°313			
10	+17°490	+12°953			9	+42°570	+35°861			22	-51°132	-28°643	65	1066	9°1	9	-25°733	-62°165		
9	+17°843	+24°267			9	+42°848	+22°712			9	-50°751	- 9°736			17	-25°578	-14°638	65	1077	
11	+17°861	+ 3°799			18	+43°589	+34°802	64	1021	9°2	15	-50°389	- 9°304	65	1067	9°5	11	-25°334	- 0°055	
10	+17°909	+ 4°337			9	+43°655	+16°159			92	-50°314	-61°312	65	1065	5°3	9	-24°692	-24°479		
9	+18°046	+ 5°700			9	+43°666	+25°691			10	-49°075	-48°622			19	-24°245	-47°148	65	1078	
12	+19°435	+53°878	64	1016	9°5	9	+43°933	+15°937			9	-49°061	-19°883		16	-23°940	-32°331			
20	+19°602	+62°926	63	1109	8°9	10	+44°985	+10°783			9	-48°606	-21°668		24	-23°712	- 5°581	64	1004	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
21	351 -23.635	-45.839	65 1079	8.9	9	+0.196	-10.668	65 1086	9.1	10	+26.821	-16.583	65 1097	8.9	15	+51.251	-10.011	65 1102	9.5
9	-22.610	-12.409			21	+0.358	-34.673			9	+27.653	-26.001			9	+51.591	-2.491		
9	-22.268	-37.128			9	+0.764	-58.631			9	+27.743	-50.029			10	+52.435	-51.300		
15	-22.178	-12.312			9	+1.791	-13.080			9	+27.771	-0.375			9	+53.170	-32.745		
9	-21.312	-48.851			9	+2.321	-13.888			11	+28.440	-29.723			10	+53.537	-63.250		
18	-20.950	-20.363	65 1081	9.3	9	+2.806	-11.770	65 1087	8.6	9	+28.661	-48.798	65 1099	8.9	11	+53.986	-30.553	65 1102	9.5
17	-20.828	-59.283	65 1080	9.2	9	+3.094	-18.693			9	+28.855	-0.418			9	+54.617	-13.791		
9	-20.792	-52.412			12	+3.124	-18.151			9	+30.942	-29.308			12	+54.758	-7.407		
10	-19.815	-48.954			9	+3.368	-38.496			9	+31.275	-34.221			9	+55.174	-20.328		
9	-19.383	-56.383			28	+3.860	-25.988			10	+31.444	-58.726			9	+56.591	-52.755		
9	361 -19.093	-55.405	65 1082	9.5	9	+3.994	-17.790	65 1088	9.4	9	+31.634	-58.100	65 1107	8.9	9	+57.037	-29.427	65 1102	9.5
19	-18.150	-51.516			9	+4.184	-40.772			9	+33.317	-40.573			13	+59.391	-50.866		
9	-18.050	-28.283			9	+4.518	-2.934			15	+33.407	-18.153			9	+60.673	-53.931		
9	-17.831	-43.405			9	+5.455	-44.855			10	+33.433	-5.444			15	+60.815	-29.246		
10	-17.199	-18.990			9	+5.896	-10.728			11	+34.135	-10.509			9	+61.301	-49.848		
10	-16.623	-0.543	65 1083	9.5	9	+6.060	-22.315	65 1089	9.2	11	+34.366	-26.865	65 1109	8.9	9	+61.793	-31.322	65 1102	9.5
9	-16.314	-27.119			9	+6.763	-26.937			11	+34.545	-7.466			10	+63.977	-49.483		
9	-16.215	-43.828			19	+7.086	-46.974			9	+35.869	-5.105							
9	-15.685	-19.611			12	+7.453	-2.644			9	+36.190	-29.192							
9	-15.605	-32.565			13	+7.454	-25.781			12	+36.957	-35.887							
9	371 -15.006	-60.696	65 1084	9.2	9	+7.605	-3.458	65 1090	9.5	9	+37.124	-60.087	65 1109	8.9				65 1102	9.5
9	-14.784	-17.707			9	+7.713	-18.071			9	+37.216	-28.479							
9	-13.984	-47.717			19	+7.718	-30.677			11	+38.290	-58.077							
11	-13.796	-47.869			9	+8.484	-28.820			21	+38.531	-21.431							
9	-13.744	-43.442			12	+8.892	-10.019			9	+38.740	-15.248							
9	-13.220	-49.492	65 1085	9.4	9	+10.066	-27.933	65 1091	8.2	9	+38.976	-53.671	65 1109	8.9				65 1102	9.5
18	-12.950	-13.991			10	+10.077	-15.899			9	+39.111	-54.013							
9	-12.762	-18.664			9	+10.565	-42.750			9	+39.374	-32.416							
11	-12.424	-3.314			13	+10.885	-61.783			9	+39.965	-29.585							
10	-11.939	-25.081			35	+11.599	-19.211			15	+40.011	-51.110							
14	381 -11.441	-35.972	65 1086	9.2	9	+11.741	-44.348	65 1092	9.5	10	+40.186	-5.342	65 1109	8.9				65 1102	9.5
19	-10.819	-26.338			9	+11.998	-25.677			9	+41.872	-16.614							
9	-10.777	-25.084			9	+13.305	-32.290			9	+42.137	-27.481							
9	-10.284	-42.690			11	+14.940	-49.575			9	+42.144	-10.133							
9	-10.048	-46.818			9	+15.531	-50.341			10	+42.238	-35.965							
9	-7.975	-60.544	65 1087	9.2	10	+17.305	-40.662	65 1093	9.0	9	+42.766	-37.929	65 1109	8.9				65 1102	9.5
9	-7.872	-25.598			16	+17.864	-22.859			9	+42.871	-30.168							
9	-7.854	-38.074			9	+18.143	-18.000			9	+42.924	-19.804							
10	-7.540	-23.740			9	+19.092	-23.308			9	+43.206	-31.507							
9	-7.441	-2.489			9	+19.287	-0.110			9	+43.411	-28.975							
9	391 -7.003	-47.364	65 1088	9.2	10	+19.384	-6.934	65 1094	9.2	11	+43.498	-33.180	65 1109	8.9				65 1102	9.5
10	-6.383	-14.174			15	+19.789	-58.247			13	+44.567	-20.070							
9	-5.688	-14.566			9	+19.899	-11.220			15	+44.571	-25.323							
12	-5.376	-10.072			12	+19.903	-3.906			24	+44.678	-45.366							
16	-5.349	-9.444			24	+20.902	-45.808			9	+45.303	-54.325							
9	-5.347	-39.450	65 1089	9.4	9	+20.930	-17.405	65 1095	8.5	13	+45.671	-1.593	65 1109	8.9				65 1102	9.5
34	401 -4.496	-5.030			9	+21.119	-41.752			9	+45.892	-30.059							
10	-4.037	-42.238			19	+21.629	-59.960			12	+46.133	-27.961							
12	-3.304	-5.871			9	+21.877	-44.738			9	+46.162	-32.474							
9	-3.294	-42.506			10	+22.429	-46.002			18	+46.444	-58.091							
9	-2.636	-8.453	65 1090	9.2	32	+22.752	-28.049	65 1096	8.6	9	+46.894	-27.619	65 1109	8.9				65 1102	9.5
15	-2.362	-7.480			14	+24.245	-21.935			24	+46.920	-1.365							
15	-1.288	-21.743			23	+24.893	-42.093			10	+47.518	-29.033							
9	-1.190	-4.190			9	+25.090	-29.465			10	+48.952	-30.278							
9	-0.998	-23.282			9	+25.315	-39.176			15	+49.150	-30.075							
10	-0.960	-23.222	65 1091	8.9	13	+26.032	-9.355	65 1097	9.2	9	+49.628	-35.904	65 1109	8.9				65 1102	9.5
9	-0.740	-11.998			9	+26.324	-61.368			9	+49.747	-5.071							
9	-0.724	-14.388			11	+26.468	-42.097			9	+49.956	-29.667							
9	-0.106	-37.438			16	+26.669	-50.995			9	+50.547	-29.069							
10	+0.028	-41.926			9	+26.811	-16.857			24	+50.970	-14.319							

C.P.D.					C.P.D.					C.P.D.					C.P.D.														
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.										
PLATE CENTRE 9h 27m, - 65°. Plate 3243 1910, Feb. 14. PROVISIONAL CONSTANTS. a = - .01160 d = - .00076 b = + .00075 e = - .01143 c = + .1218 f = - .0056 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51, 10 -48.484 +39.147 14 -47.586 +32.028 13 -47.296 +30.947 13 -47.266 +32.103 15 -47.090 + 9.803 9 -46.625 +56.595 28 -46.267 +40.131 12 -46.089 +36.743 12 -46.076 + 0.920 12 -46.014 +22.903 61 11 -45.827 +37.283 12 -44.269 +55.127 14 -44.166 +24.335 15 -43.910 + 0.647 9 -43.861 +10.798 10 -43.749 +41.880 11 -43.591 +44.061 9 -43.525 +38.285 14 -43.352 +19.313 12 -43.079 +35.892 71 9 -42.504 +60.879 9 -42.085 +26.765 15 -41.875 +38.931 9 -41.426 + 7.963 11 -40.718 + 6.697 9 -40.421 +46.252 24 -40.340 +46.585 16 -40.101 +18.537 17 -39.838 +23.878 16 -39.757 + 8.989 81 11 -39.491 +13.420 14 -39.447 +58.074 15 -39.104 +13.446 16 -38.773 +27.461 9 -38.455 +18.147 16 -38.323 +50.669 26 -38.161 +38.959 16 -38.131 +14.236 12 -38.120 +38.857 10 -38.094 +47.330 91 14 -37.708 + 9.756 14 -37.661 + 9.207 16 -37.288 +15.914 9 -37.169 + 1.258 9 -37.041 +23.625 10 -37.020 +19.555 26 -36.973 +23.703 10 -36.668 +16.406 16 -36.557 +46.082 11 -36.451 + 2.658 101 13 -36.333 +56.701 16 -36.272 +39.260 13 -36.058 +14.234 15 -35.668 +35.384 15 -35.465 +59.353 12 -35.044 +16.851 10 -34.943 +37.481 10 -34.838 +31.945 12 -34.129 + 0.100 13 -33.961 +49.524					111, 12 -33.877 +18.393 16 -33.862 +55.800 16 -33.700 + 9.367 13 -33.350 +14.804 11 -33.316 +38.848 12 -33.312 +29.846 10 -32.988 +16.510 9 -32.849 +22.744 9 -32.731 +51.133 10 -32.156 +35.304 121 9 -32.051 + 1.438 16 -31.605 +10.294 11 -31.363 +38.199 9 -31.325 +55.673 11 -30.867 +22.766 11 -30.609 +24.092 16 -30.297 +31.207 12 -30.133 +29.750 14 -29.998 + 7.467 12 -29.946 + 0.765 131 14 -29.080 +62.614 30 -28.848 +23.863 16 -28.798 +46.669 10 -28.795 +46.468 10 -28.757 +55.021 9 -28.614 +52.206 13 -28.594 + 3.106 15 -28.584 +22.630 11 -28.197 +27.275 9 -28.170 +42.242 141 9 -28.091 +18.175 52 -28.079 +43.666 32 -27.633 +48.696 10 -27.356 + 9.643 9 -26.819 +28.132 9 -26.736 +39.430 10 -26.691 +54.981 11 -26.635 +15.999 25 -26.576 +52.295 22 -25.958 +39.357 151 9 -25.777 +34.033 15 -25.714 +47.560 11 -25.206 +38.432 58 -24.848 + 9.617 10 -24.171 +11.385 15 -24.158 +26.266 14 -24.134 +11.471 12 -24.123 +38.713 16 -24.075 +47.915 12 -24.008 +38.026 161 30 -23.962 + 4.678 11 -23.606 +55.485 11 -23.251 +46.977 14 -23.168 +16.922 10 -23.160 +25.064 14 -23.084 +26.851 16 -22.970 +13.423 9 -22.722 + 3.814 10 -22.716 +15.230 34 -22.461 +16.316					171, 13 -22.260 +20.792 13 -22.250 +62.172 15 -21.995 +51.980 9 -21.810 +11.130 15 -21.780 +25.152 14 -21.406 +29.991 10 -21.279 +41.878 12 -20.978 +49.959 9 -20.883 +39.597 9 -20.856 +13.281 181 11 -20.242 +31.935 10 -19.851 + 6.657 10 -19.192 +44.826 11 -18.870 +17.699 14 -18.866 +41.304 11 -17.941 +28.406 13 -17.790 +49.698 24 -17.458 +48.422 13 -17.305 + 3.135 10 -17.294 +21.394 191 16 -16.851 +59.745 14 -16.770 +12.794 14 -16.462 +17.172 14 -16.124 +46.127 73 -16.032 +30.485 14 -15.703 +10.915 10 -15.328 +44.346 26 -15.142 +40.468 9 -14.789 +63.217 10 -14.548 +30.223 201 9 -14.184 +22.893 11 -14.080 +15.399 10 -14.076 + 5.024 9 -13.922 +61.902 12 -13.855 +49.682 9 -13.825 + 0.652 11 -12.919 +13.824 10 -12.316 +27.386 14 -12.113 +28.052 10 -11.654 +49.900 211 10 -11.585 +41.058 15 -11.494 +18.232 14 -11.017 + 4.192 11 -10.708 +10.230 11 -10.287 +58.045 9 -10.282 +38.357 11 - 9.768 + 0.854 10 - 8.922 +39.119 10 - 8.498 + 6.902 12 - 7.010 +47.124 221 9 - 6.715 +32.411 9 - 5.857 +44.352 11 - 5.565 +48.203 12 - 5.285 + 4.714 11 - 4.603 + 8.945 12 - 4.378 +48.216 14 - 4.179 +21.875 9 - 3.926 +51.771 14 - 3.427 +51.399 13 - 3.345 +35.709					64 1026 9.5 64 1027 9.3 64 1029 9.4 64 1030 9.2 64 1032 7.8 64 1033 9.2 64 1034 7.2 64 1035 9.4 64 1036 9.5					64 1037 6.6				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
I4	- 3.149	+11.500			I2	+16.227	+34.185			IO	+30.490	+31.582			II	+43.125	+25.917		
9	- 2.946	+38.285			I3	+16.236	+50.981			II	+30.671	+11.661			I4	+43.131	+31.297		
I6	- 2.586	+50.707			I5	+16.255	+12.401			I4	+30.685	+10.993			I5	+43.491	+37.387		
II	- 2.526	+50.697			I4	+16.621	+ 4.185			IO	+30.763	+20.951			72	+44.041	+29.654	64 1049	7.0
I5	- 2.130	+16.757			I2	+16.648	+61.977			9	+30.769	+37.115			II	+44.227	+12.982		
I4	- 1.994	+23.961			9	+16.662	+41.889			I2	+30.922	+50.532			IO	+44.236	+41.228		
I4	- 1.786	+64.579			I2	+17.249	+32.796			IO	+30.929	+ 8.403			I2	+44.534	+ 6.202		
I3	- 1.519	+36.503			I3	+17.343	+51.917			I4	+31.045	+37.204			9	+44.559	+31.855		
II	- 1.404	+45.829			9	+17.485	+ 4.331			IO	+31.279	+28.927			I6	+44.503	+28.625		
22	- 1.029	+39.589			I2	+17.552	+48.185			I2	+31.384	+ 3.368			I3	+44.953	+20.277		
	241					301					361					421			
9	- 1.027	+56.965			I2	+17.990	+47.422			I4	+31.460	+44.122			31	+45.007	+55.499	63 1141	9.2
I4	- 0.878	+46.308			II	+18.158	+35.281			I4	+31.772	+36.334			IO	+45.506	+36.780		
I8	- 0.702	+53.511			I2	+18.950	+22.541			9	+31.850	+57.576			9	+45.622	+12.831		
34	- 0.452	+48.873	64 1038	9.1	I3	+19.642	+22.336			I2	+32.858	+21.305			II	+46.078	+19.051		
I3	- 0.451	+60.063			I5	+19.981	+ 5.057			9	+32.879	+33.042			II	+46.510	+37.302		
I4	- 0.385	+60.671			I2	+20.053	+ 1.187			II	+32.971	+11.465			IO	+46.092	+56.840		
9	- 0.296	+58.585			IO	+20.068	+25.657			I6	+33.005	+49.337			I2	+47.169	+ 4.883		
9	+ 0.049	+18.972			II	+20.478	+30.518			I3	+33.734	+57.325			I6	+47.303	+43.443		
9	+ 0.252	+53.388			42	+21.239	+ 3.896	64 1043	8.9	I3	+33.819	+15.367			I4	+47.358	+29.413		
IO	+ 0.513	+53.497			34	+21.699	+15.527			I5	+33.955	+37.015			II	+47.466	+ 2.458		
	251					311					371					431			
9	+ 0.881	+19.074			I2	+21.740	+41.894			I6	+34.207	+14.548			I6	+47.566	+10.758		
I6	+ 1.075	+12.112			I5	+22.060	+34.148			I4	+34.264	+23.187			IO	+47.600	+ 6.883		
I3	+ 1.144	+57.325			I2	+22.246	+59.169			I5	+34.438	+ 4.647			II	+47.964	+20.411		
II	+ 1.433	+15.844			I5	+22.897	+24.361			9	+34.550	+55.613			IO	+48.196	+ 9.099		
9	+ 1.716	+59.091			9	+22.906	+26.046			I4	+35.088	+24.281			I3	+48.387	+ 8.827		
IO	+ 1.972	+27.093			9	+22.931	+43.472			I3	+35.312	+63.523			I6	+48.484	+ 1.803		
27	+ 3.499	+15.769	64 1040	9.5	I2	+22.938	+57.190			9	+35.567	+35.567			I6	+49.329	+41.410		
22	+ 3.976	+33.239	64 1041	9.5	II	+23.365	+42.146			II	+35.907	+14.998			I6	+49.392	+12.662		
II	+ 4.381	+15.898			I4	+23.538	+19.910			II	+36.552	+19.772			I5	+49.925	+17.307		
I4	+ 5.141	+48.998			9	+23.644	+54.699			I5	+36.582	+64.409			24	+49.973	+40.110		
	261					321					381					441			
I4	+ 6.081	+20.430			IO	+23.764	+19.285			43	+36.648	+28.735	64 1045	8.1	I6	+50.528	+45.757		
II	+ 6.391	+26.727			II	+24.106	+26.871			I4	+37.434	+22.639			I5	+51.091	+ 9.490		
I4	+ 6.478	+25.573			I4	+24.487	+42.763			I5	+37.842	+49.878			I5	+51.694	+ 5.154		
I5	+ 7.412	+29.955			II	+24.818	+35.768			9	+38.138	+52.959			I5	+51.875	+61.643		
I2	+ 7.440	+25.477			9	+24.931	+ 8.277			9	+38.351	+53.510			46	+52.199	+17.714	64 1050	8.4
9	+ 8.142	+64.145			IO	+24.987	+ 1.896			9	+38.368	+26.766			II	+52.376	+33.640		
I6	+ 8.582	+11.793			I2	+25.126	+56.854			9	+38.645	+26.133			I4	+52.445	+37.373		
I6	+ 8.707	+ 3.858			I3	+25.163	+21.192			I4	+39.003	+31.648			I3	+52.592	+ 4.935		
I2	+11.237	+37.301			9	+25.298	+13.611			29	+39.277	+13.588	64 1046	9.4	IO	+52.748	+27.449		
I2	+11.491	+56.335			I2	+25.540	+22.075			25	+39.465	+10.455	64 1047	9.5	I3	+53.217	+ 3.655		
	271					331					391					451			
9	+11.801	+20.292			I6	+25.571	+12.715			II	+39.647	+39.572			I6	+54.001	+ 4.043		
9	+11.981	+31.968			I5	+25.666	+54.014			II	+39.863	+11.883			I3	+54.618	+ 5.418		
IO	+12.255	+61.739			I4	+25.673	+48.754			II	+39.911	+30.141			9	+55.332	+ 1.083		
II	+12.284	+23.837			IO	+25.706	+10.562			I2	+39.931	+ 6.577			9	+55.420	+62.418		
IO	+12.319	+46.305			I3	+25.794	+36.481			34	+40.045	+60.801			25	+55.477	+25.599		
9	+12.550	+35.686			I6	+26.098	+58.974			I3	+40.173	+20.019			I2	+55.533	+37.280		
I5	+13.284	+38.708			21	+26.247	+59.118			25	+40.280	+19.494	64 1048	9.5	I6	+56.326	+48.234		
IO	+13.371	+60.333			IO	+26.700	+27.763			IO	+40.324	+41.110			I5	+59.798	+ 3.456		
24	+13.792	+11.063			I2	+26.781	+ 2.864			II	+40.335	+26.523			9	+56.959	+43.087		
I6	+13.893	+53.412			9	+27.383	+42.666			9	+40.635	+37.429			II	+57.743	+12.507		
	281					341					401					461			
I3	+13.902	+34.251			I3	+27.496	+ 7.341			9	+41.350	+13.484			I6	+58.065	+10.537		
I2	+14.463	+17.216			II	+27.814	+16.427			II	+41.371	+ 2.421			I2	+58.057	+38.282		
9	+14.803	+53.446			IO	+28.314	+48.212			IO	+41.459	+34.235			I2	+58.992	+30.000		
I6	+14.877	+ 3.607			II	+28.380	+27.006			I2	+41.681	+ 8.393			32	+59.080	+31.758		
I5	+15.436	+38.746			I5	+28.686	+54.082			I4	+41.749	+31.520			92	+59.354	+62.078	63 1144	7.0
II	+15.766	+34.184			I6	+29.308	+30.436			IO	+42.157	+15.100			9	+59.539	+12.073		
I2	+15.831	+33.778			9	+29.650	+31.162			I3	+42.278	+34.037			I3	+60.173	+30.370		
IO	+15.877	+14.718			I6	+29.768	+39.370			I2	+42.488	+16.049			II	+60.821	+25.393		
9	+15.942	+48.222			26	+30.344	+10.606	64 1044	9.5	I2	+42.541	+60.609			9	+61.331	+ 9.558		
25	+16.201	+11.723			I5	+30.435	+12.043			58	+43.087	+53.794	63 1139	7.2	9	+61.466	+49.535		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471,					581,					591,					651,			
10	+61.527	+38.909			9	-46.931	-50.607			12	-33.875	-14.366			9	-19.800	-30.068		
9	+61.700	+26.043			9	-46.830	-19.957			11	-33.021	-26.738			10	-19.635	-24.838		
48	+62.069	+26.871	64 11051	8.9	26	-46.600	-17.670	65 1104	9.2	9	-32.714	-58.223			17	-19.445	-44.804		
14	+62.241	+23.847			11	-46.298	-31.686			9	-32.572	-49.059			10	-19.114	-8.266		
66	+62.240	+57.323	63 1146	8.3	12	-45.987	-42.831			11	-32.178	-51.785			15	-18.943	-37.910		
10	+62.336	+49.411			13	-45.557	-22.303			12	-32.132	-21.433			27	-18.923	-40.135	65 1107	9.5
10	+62.594	+10.445			12	-44.784	-5.537			9	-32.009	-36.155			15	-18.662	-41.010		
12	+62.678	+43.136			9	-44.648	-45.697			10	-31.977	-7.472			13	-18.129	-30.833		
15	+63.577	+6.300			9	-44.184	-23.295			12	-31.970	-35.583			12	-17.973	-29.443		
13	+63.583	+10.555			11	-43.935	-1.311			13	-31.795	-24.871			13	-17.873	-64.953		
	481					541					601					661			
9	+64.662	+57.111			9	-43.809	-16.194			12	-31.758	-21.350			10	-16.743	-46.387		
14	+64.788	+6.766			11	-43.655	-52.435			14	-31.131	-32.996			9	-16.205	-6.054		
24	-64.920	-58.665	65 1100	9.2	9	-43.630	-61.423			11	-30.550	-6.800			10	-16.129	-54.640		
12	-64.441	-30.721			12	-43.429	-38.910			10	-30.397	-25.718			10	-16.010	-15.598		
30	-64.282	-30.502			10	-42.849	-3.040			10	-30.345	-2.206			10	-15.831	-45.338		
12	-63.869	-2.829			10	-42.672	-3.160			9	-30.250	-46.431			15	-15.829	-28.503		
10	-63.843	-16.210			9	-42.512	-29.716			12	-30.174	-2.106			23	-15.686	-52.199		
34	-63.638	-10.350			10	-42.430	-32.099			10	-29.963	-52.141			11	-15.526	-10.011		
45	-63.608	-14.683	65 1101	8.9	12	-42.425	-0.133			9	-29.684	-44.489			15	-15.508	-59.604		
12	-63.495	-30.021			13	-42.157	-56.807			10	-29.523	-7.399			11	-15.462	-9.030		
	491					551					611					671			
12	-63.362	-36.272			9	-42.055	-0.431			9	-29.420	-43.339			12	-15.288	-39.877		
12	-62.939	-29.396			9	-41.749	-3.289			9	-29.318	-58.609			10	-14.201	-17.267		
15	-60.335	-7.495			9	-41.505	-16.502			9	-28.719	-18.172			9	-14.012	-47.254		
10	-60.081	-43.098			12	-41.432	-45.331			9	-28.607	-4.276			26	-13.747	-38.185	65 1108	9.5
13	-60.057	-32.865			9	-41.228	-31.567			9	-28.582	-31.779			9	-13.171	-22.954		
10	-60.006	-13.876			9	-41.217	-8.547			9	-28.485	-5.743			9	-12.976	-9.995		
14	-59.434	-51.430			12	-40.930	-10.370			10	-28.445	-36.227			13	-12.962	-58.013		
14	-59.424	-30.618			9	-40.865	-5.293			10	-28.206	-60.920			10	-12.947	-8.441		
13	-58.974	-20.332			24	-40.836	-47.938			9	-28.190	-18.047			9	-12.491	-16.074		
14	-57.482	-63.265			12	-40.639	-38.246			11	-28.004	-14.416			11	-12.179	-53.551		
	501					561					621					681			
9	-56.544	-63.668			28	-40.562	-60.711	65 1105	9.5	10	-27.628	-13.404			10	-12.137	-33.492		
12	-56.451	-29.290			9	-40.088	-26.872			12	-27.606	-46.058			10	-12.089	-24.768		
11	-56.262	-0.372			11	-39.750	-6.123			16	-27.558	-48.611			9	-11.943	-21.467		
12	-55.914	-2.469			9	-39.640	-33.735			9	-27.462	-43.049			27	-11.900	-49.986	65 1109	9.5
20	-55.460	-18.916			12	-39.452	-51.596			9	-27.363	-2.840			11	-11.856	-58.153		
14	-55.158	-52.578			48	-38.635	-6.347	64 1028	8.8	9	-27.352	-34.601			16	-11.486	-37.565		
9	-54.938	-64.849			9	-38.428	-31.617			9	-27.308	-29.558			14	-11.444	-52.049		
9	-53.714	-60.124			11	-38.197	-32.527			10	-27.173	-20.563			10	-11.222	-22.814		
9	-53.475	-21.929			13	-38.189	-37.181			9	-27.169	-30.709			12	-10.412	-56.714		
28	-52.697	-28.826			9	-37.485	-40.828			10	-26.891	-58.293			11	-10.319	-34.617		
	511					571					631					691			
35	-52.541	-50.484	65 1102	9.5	11	-37.444	-8.341			13	-26.498	-41.687			9	-9.755	-2.694		
9	-52.510	-58.402			15	-37.309	-32.037			9	-26.037	-53.306			9	-9.660	-6.479		
9	-52.511	-25.542			14	-37.270	-31.543			12	-26.006	-38.103			12	-9.165	-19.420		
13	-51.572	-30.810			9	-37.010	-20.255			10	-25.513	-31.833			12	-8.191	-4.143		
12	-51.047	-53.440			9	-36.940	-49.153			11	-25.483	-3.146			9	-7.921	-9.614		
9	-51.029	-16.888			11	-36.942	-8.165			9	-25.126	-47.980			12	-7.900	-64.684		
13	-50.700	-49.338			29	-36.792	-47.295	65 1106	9.4	9	-24.335	-11.698			13	-7.696	-13.108		
11	-50.700	-41.714			9	-36.510	-49.117			12	-24.050	-58.742			9	-7.459	-0.622		
10	-50.209	-24.467			11	-36.225	-35.726			10	-23.908	-33.788			33	-6.897	-40.277	65 1110	9.0
9	-49.760	-6.272			12	-36.120	-16.358			10	-23.655	-38.481			13	-6.433	-36.930		
	521					581					641					701			
9	-49.115	-46.688			11	-35.924	-34.915			10	-23.635	-25.140			10	-5.522	-48.935		
10	-48.910	-13.408			11	-35.687	-27.718			9	-23.327	-5.749			10	-5.210	-5.684		
10	-48.843	-32.743			9	-35.479	-56.012			10	-23.023	-20.576			9	-5.049	-50.882		
9	-48.637	-2.195			9	-35.200	-54.350			9	-22.538	-51.933			10	-4.960	-24.143		
12	-48.184	-5.059			9	-35.167	-42.507			14	-22.463	-55.346			11	-4.596	-61.819		
29	-48.041	-48.775			9	-35.056	-19.901			14	-21.286	-33.068			9	-4.042	-45.634		
9	-47.534	-25.844			10	-34.877	-41.196			9	-21.281	-15.757			10	-3.921	-30.533		
11	-47.525	-30.641			9	-34.794	-38.571			12	-20.813	-56.880			10	-3.848	-56.029		
10	-47.047	-47.565			11	-34.713	-41.607			11	-20.780	-55.054			12	-3.842	-48.824		
40	-47.050	-7.022	64 1025	9.5	12	-34.350	-50.049			12	-19.994	-59.628			26	-3.835	-9.896		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	711,					771,					831,					891,			
9	- 3°700	- 0°710			12	+16°620	-20°505			57	+33°358	-41°341	65 III 5	7°5	10	+47°317	-14°949		
14	- 3°637	-31°651			9	+16°647	-53°354			9	+33°725	-25°171			24	+47°796	-12°944		
14	- 2°609	-14°431			12	+16°648	- 1°041			9	+33°928	-35°391			63	+47°948	-58°982	65 III 8	7°8
10	- 2°553	-16°321			13	+16°977	-52°653			12	+34°232	-41°710			9	+48°343	-38°762		
10	- 2°361	-23°563			9	+17°140	-18°918			12	+34°709	-26°418			15	+48°738	-15°467		
10	- 2°025	-34°712			9	+17°220	-32°279			10	+34°846	-18°150			12	+48°796	-20°025		
32	+ 0°193	- 5°013	64 I 039	9°2	15	+17°275	-39°376			12	+34°861	-58°797			11	+49°103	- 5°550		
12	+ 0°209	- 7°076			10	+17°349	-18°328			29	+35°186	-18°603	65 III 6	9°4	14	+49°250	-18°062		
9	+ 0°789	-61°888			10	+17°697	-39°996			9	+35°705	-32°572			13	+49°598	-44°209		
16	+ 0°914	-18°087			12	+18°800	-56°261			15	+35°879	-13°156			12	+49°818	- 1°899		
	721					781					841					901			
9	+ 1°335	-17°405			9	+18°967	-10°524			11	+36°244	-36°329			9	+50°906	-32°725		
13	+ 1°502	-55°755			10	+19°025	-52°845			12	+36°263	-51°781			9	+51°213	-36°627		
15	+ 1°793	-20°156			13	+19°804	-20°311			12	+36°285	-37°443			11	+51°279	-39°831		
10	+ 1°827	-24°492			12	+20°211	- 3°241			9	+36°364	- 3°601			13	+51°556	-34°522		
9	+ 1°946	-38°590			37	+20°382	- 3°193	64 I 042	8°6	9	+36°506	-27°168			14	+51°573	-38°389		
9	+ 2°281	-41°210			13	+20°436	-25°901			12	+36°524	-42°951			12	+52°067	- 6°423		
11	+ 2°722	- 1°773			11	+21°253	-39°500			10	+36°705	- 1°931			9	+52°559	-64°342		
12	+ 3°105	-25°629			13	+21°357	-40°206			11	+36°721	-54°451			9	+53°178	-57°394		
10	+ 3°566	- 0°298			9	+21°371	-25°333			11	+37°178	-22°639			15	+53°336	-43°511		
12	+ 4°674	-53°525			12	+21°492	-20°998			11	+37°749	-12°970			48	+53°950	-61°742	65 III 9	9°4
	731					791					851					911			
10	+ 5°040	-37°160			11	+21°756	-47°825			11	+37°786	-23°383			14	+54°018	-26°710		
9	+ 5°287	-41°602			13	+21°945	-33°453			9	+37°983	-17°662			9	+54°188	-25°134		
9	+ 5°582	-20°283			9	+22°178	- 2°770			12	+38°935	-32°410			9	+54°408	-60°554		
9	+ 5°924	-51°531			9	+22°269	-27°828			13	+39°447	-50°879			9	+54°427	-39°703		
12	+ 6°081	-12°244			9	+22°360	-28°042			10	+39°485	-30°328			9	+54°631	-11°245		
9	+ 6°461	-51°038			10	+22°681	-28°889			17	+39°492	-23°983			12	+54°756	-42°425		
12	+ 6°712	-40°494			29	+23°198	-52°765	65 III 4	9°1	16	+39°632	-29°658			16	+55°506	-22°938		
11	+ 7°597	-34°699			12	+23°749	-26°933			9	+39°894	-25°193			12	+55°912	- 0°171		
9	+ 7°765	-25°402			9	+23°862	- 0°208			9	+40°353	-18°942			42	+56°036	-48°751	65 III 20	9°4
9	+ 7°845	-49°059			12	+24°260	-34°372			10	+40°729	-10°804			12	+56°105	-58°169		
	741					801					861					921			
11	+ 8°290	-21°308			11	+24°329	- 6°439			12	+41°076	-37°717			12	+56°334	-42°304		
11	+ 8°504	-44°185			13	+24°917	-38°743			9	+41°091	-57°000			12	+57°082	- 4°936		
13	+ 8°970	-52°008			24	+25°625	- 4°088			13	+41°283	-48°944			11	+57°325	-50°367		
10	+ 9°068	- 7°177			9	+25°840	-28°980			15	+41°568	- 2°793			12	+57°575	-33°786		
43	+ 9°823	-45°423	65 III 1	9°0	11	+26°207	-63°619			12	+42°050	- 5°218			10	+58°124	-15°378		
11	+ 9°945	-47°237			10	+26°513	-21°847			10	+42°060	-37°956			9	+58°597	-15°745		
9	+10°447	-31°963			12	+26°930	-13°307			14	+42°436	-52°796			9	+58°636	- 2°247		
10	+10°548	-60°817			10	+27°300	-15°021			12	+42°501	-20°959			10	+59°169	-47°533		
10	+10°868	-37°451			12	+27°675	-19°726			13	+42°669	-23°527			9	+59°237	-59°313		
9	+11°294	-27°616			11	+27°717	-14°442			12	+42°729	- 5°511			12	+59°501	-33°574		
	751					811					871					931			
12	+11°446	-38°879			10	+27°962	-35°225			10	+42°788	-49°184			12	+60°277	-61°611		
9	+11°808	-32°198			11	+28°065	-14°690			12	+42°981	- 7°857			9	+60°390	-47°197		
34	+11°970	-86°009	65 III 2	9°0	11	+28°360	-30°114			9	+43°118	- 8°777			9	+60°527	-33°121		
12	+12°127	-12°412			9	+28°423	- 2°704			9	+43°228	-54°034			34	+60°539	-17°847		
10	+12°361	- 6°569			16	+28°829	-35°203			28	+43°434	-60°592			12	+60°861	-17°232		
12	+12°659	-29°445			10	+28°880	-29°708			24	+43°987	-19°698			9	+60°985	-55°698		
12	+13°461	-42°996			12	+29°551	-10°061			13	+44°288	-41°410			10	+61°176	-40°580		
10	+13°474	-49°492			9	+30°346	-59°039			17	+44°542	- 3°099			11	+61°198	-19°974		
9	+13°549	-40°500			10	+30°358	-63°986			9	+44°576	-44°880			11	+61°588	-48°700		
9	+13°644	-62°145			11	+30°507	-20°805			10	+44°641	-12°504			9	+61°599	- 6°450		
	761					821					881					941			
15	+13°935	-20°946			9	+30°925	- 2°142			16	+45°114	-15°546			14	+62°627	-43°811		
9	+14°595	-28°162			11	+31°286	-27°446			11	+45°120	-11°517			11	+62°697	-19°105		
10	+15°198	- 0°012			9	+31°286	- 2°133			9	+45°219	- 1°377			10	+63°143	-42°469		
13	+15°388	-24°888			9	+31°415	-34°543			10	+45°446	-14°326			9	+63°777	-25°682		
16	+15°495	-37°219			11	+31°934	-15°749			38	+45°650	-59°274	65 III 7	9°3	9	+64°695	-32°640		
9	+15°796	-53°537			9	+32°176	-28°962			12	+46°093	-47°482							
9	+15°812	-20°959			10	+32°508	-60°492			9	+46°360	-43°773							
9	+15°817	-37°724			12	+33°151	- 1°319			24	+46°534	-10°850							
14	+16°266	-20°645			10	+33°292	-41°556			12	+46°849	-39°524							
9	+16°300	-28°399			13	+33°280	-32°773			11	+47°309	-46°384							

PLATE CENTRE.					51,					111,					171,																			
9h 45m, - 65°.																																		
Plate 674. 1893, March 13.																																		
PROVISIONAL CONSTANTS.																																		
a = - .01148		d = + .00004			-19.335		+16.798		64 1073	9.9	+27.385		+26.007		64 1110	9.4	-37.013		- 6.031															
b = + .00024		e = - .01138			-17.583		+50.157		64 1074	9.9	+29.505		+51.102		64 1111	9.6	-36.663		-20.737															
c = - .0075		f = - .0167			-17.035		+38.645		64 1075	9.5	+30.501		+11.848		64 1112	9.4	-36.602		-35.629		65 1127	9.6												
To obtain standard co-ordinates, ξ, η					-17.019					+48.947					+32.723					+26.501					-36.096					-12.583				
					-16.878					+46.901					+33.230					+6.628					-35.917					-32.128				
					-16.675					+39.352					+33.925					+15.645					-35.851					- 0.670				
					-15.596					+16.943					+34.010					+25.349					-33.322					-63.900				
					-13.915					+58.343					+34.553					+25.121					-32.990					-58.654				
					-13.020					+56.105					+35.281					+21.683					-32.615					-16.587				
					-12.684					+64.002					+38.704					+46.504					-32.168					-53.276				
					-12.441					+41.187					+39.347					+22.108					-31.188					- 2.343				
					-11.609					+39.706					+40.483					+27.933					-29.985					- 8.334				
					-11.184					+46.455					+41.570					+20.989					-28.471					-57.941				
					-10.257					+31.585					+42.307					+48.028					-27.907					-41.386				
					-10.162					+62.412					+42.550					+57.395					-27.134					-36.123				
					-10.122					+28.696					+43.046					+9.829					-26.218					-45.338				
					- 6.216					+42.771					+43.526					+36.715					-25.901					-32.449				
					- 4.991					+50.118					+44.208					+55.302					-25.290					-36.942				
					- 4.710					+12.830					+45.099					+52.918					-24.594					-45.492				
					- 4.272					+48.538					+46.308					+59.738					-23.365					- 7.887				
					- 2.800					+10.140					+47.872					+23.637					-21.739					- 5.927				
					- 2.562					+23.770					+48.026					+29.791					-21.223					-55.833				
					- 0.976					+46.609					+48.899					+22.461					-21.204					-19.259				
					- 0.625					+15.750					+49.082					+ 1.191					-21.191					-60.976				
					+ 2.008					+20.992					+49.912					+ 9.644					-21.063					- 6.013				
					+ 2.176					+20.876					+53.687					+15.219					-19.012					-48.696				
					+ 3.201					+41.782					+54.105					+15.767					-18.967					-45.104				
					+ 3.268					+42.850					+54.712					+ 6.367					-18.481					-13.098				
					+ 3.978					+21.374					+55.279					+ 7.183					-18.269					-27.769				
					+ 4.492					+32.648					+55.517					+ 5.041					-18.030					-46.111				
					+ 5.157					+51.609					+56.337					+49.502					-17.628					-22.586				
					+ 7.210					+17.921					+56.663					+28.153					-17.071					-26.815				
					+ 7.892					+56.455					+58.814					+43.988					-16.815					-18.322				
					+ 9.078					+23.636					+60.071					+ 9.700					-15.939					-32.762				
					+ 9.330					+13.625					+62.022					+ 8.315					-15.762					-48.497				
					+ 9.567					+13.738					+63.494					+58.528					-15.607					-42.359				
					+ 9.634					+ 8.200					+64.913					+38.470					-14.684					-61.371				
					+ 9.951					+11.262					+64.807					-18.632					-13.304					-49.276				
					+ 9.993					+62.277					+63.243					-59.550					-13.027					-47.361				
					+10.214					+54.229					+61.084					-38.750					-13.002					-44.629				
					+10.428					+11.604					+59.445					-26.937					-12.574					-54.757				
					+10.469					+41.151					+58.960					-43.733					-11.469					-59.690				
					+10.890					+13.197					+58.245					-23.063					-11.079					- 9.661				
					+11.342					+62.445					+57.040					-61.874					-10.597					-43.123				
					+11.600					+12.909					+56.034					-42.312					-10.536					- 3.849				
					+12.016					+13.542					+55.872					-48.754					- 9.987					-46.641				
					+12.075					+53.097					+54.888					-14.862					- 7.730					-37.350				
					+12.391					+51.017					+53.570					-17.630					- 6.898					-15.514				
					+12.474					+43.427					+50.819					-42.653					- 6.139					-61.969				
					+13.602					+ 7.465					+49.676					-43.372					- 3.798					-36.256				
					+14.824					+29.602					+47.817					-21.812					- 3.752					- 2.768				
					+14.951					+ 0.972					+44.841					-11.584					- 3.453					-49.903				
					+16.563					+17.709					+44.403					-52.319					- 3.298					-46.759				
					+17.269					+16.661					+43.101					-12.332					- 2.398					-20.470				
					+17.418					+59.293					+41.614					-14.254					- 1.745					-49.856				
					+18.500					+27.442					+41.579					-64.116					- 0.625					-60.057				
					+18.795					+48.081					+41.346					-37.703					+ 0.086					-40.457				
					+20.547					+54.803					+39.838					-31.433					+ 0.916					-43.725				
					+21.165					+1.226					+38.470					-38.411					+ 0.957					-24.094				
					+23.764					+25.304					+38.191					-25.112					+ 3.007					-54.945				
					+18.500					+27.442					+41.579					-64.116					- 0.625					-60.057				
					+18.795					+48.081					+41.346					-37.703					+ 0.086					-40.457				
					+20.547					+54.803					+39.838					-31.433					+ 0.916					-43.725				
					+21.165					+1.226					+38.470					-38.411					+ 0.957					-24.094				
					+23.764					+25.304					+38.191					-25.112					+ 3.007					-54.945				

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,										51,					111,			
11	+ 4'149	-31'655	65 1157	9'9	PLATE CENTRE. 10 ^h 3 ^m , - 65°. Plate 218. 1892, March 24. PROVISIONAL CONSTANTS. $a = -\cdot 01167$ $d = +\cdot 00147$ $b = -\cdot 00147$ $e = -\cdot 01162$ $c = +\cdot 0572$ $f = -\cdot 0674$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					9	-46'074	+ 6'999			15	-29'043	+34'640	64 1149	9'6
9	+ 4'576	-15'327								9	-45'854	+45'056			10	-29'020	+43'351	64 1150	9'9
15	+ 4'625	- 9'632	65 1158	9'5						9	-45'659	+21'245			15	-28'731	+57'248	63 1268	9'4
10	+ 5'332	-51'344	65 1159	9'9						22	-45'558	+50'017	64 1141	8'8	10	-28'700	+43'387	64 1151	9'9
11	+ 5'376	-53'936	65 1160	9'8						12	-45'293	+41'815	64 1142	9'6	9	-28'681	+14'078		
18	+ 6'751	-43'383	65 1161	9'5						36	-45'265	+ 2'530	64 1140	8'8	9	-28'659	+34'409		
12	+ 8'286	-14'271	65 1162	9'6						9	-45'175	+17'564			9	-28'526	+17'615		
16	+10'801	-12'537	65 1163	9'5						9	-44'750	+41'260			20	-27'935	+ 6'211	64 1152	9'2
21	+13'168	-41'299	65 1164	9'2						9	-44'537	+17'373			9	-27'832	+50'661		
10	+13'594	-60'537	65 1166	9'9						9	-44'518	+40'803			9	-27'688	+41'267		
	241										61					121			
10	+13'698	-40'469	65 1165	9'9	9	-64'146	+12'068			9	-43'971	+33'700			9	-27'435	+ 6'609		
9	+14'790	-38'486			17	-62'928	+15'497	64 1125	9'3	9	-43'730	+56'587			9	-27'434	+29'120		
9	+15'666	-57'779			24	-62'648	+49'435	64 1128	9'0	17	-42'845	+63'512	63 1255	9'3	16	-27'340	+44'298	64 1153	9'5
18	+17'209	-37'623	65 1167	9'5	9	-62'636	+15'961			9	-42'834	+37'887			9	-26'595	+50'916		
9	+17'724	-64'659			18	-62'544	+15'625	64 1126	9'3	9	-42'143	+52'654			9	-26'426	+59'069		
16	+17'730	-22'875	65 1168	9'5	9	-61'659	+ 0'397			9	-41'542	+ 8'468			9	-24'909	+54'255		
34	+18'059	-39'229	65 1169	8'6	18	-61'292	+ 6'283	64 1127	9'3	11	-41'441	+45'752	64 1145	9'9	11	-24'716	+15'707		
9	+18'489	-62'441			9	-61'184	+ 8'105			9	-41'416	+38'435			9	-24'227	+55'124		
17	+18'522	-19'031	65 1170	9'4	9	-60'845	+28'154			9	-41'272	+48'910			10	-24'009	+47'650		
9	+19'768	-48'600			11	-60'788	+ 7'137	64 1129	9'9	11	-41'227	+16'939	64 1144	9'9	9	-23'850	+32'281		
	251					11					71					131			
9	+20'107	-53'147			9	-60'386	+ 5'015			15	-41'190	+ 8'674	64 1143	9'5	9	-23'841	+10'588		
13	+22'382	-26'992	65 1171	9'5	9	-59'827	+44'067			10	-40'977	+30'095			9	-23'794	+18'501		
15	+23'090	-29'225	65 1172	9'4	9	-59'755	+44'131	64 1130	9'9	10	-40'915	+39'506			9	-23'543	+38'185		
14	+23'704	- 3'239	64 1109	9'6	9	-59'396	+63'049			9	-40'779	+28'544			9	-23'253	+ 1'460		
10	+26'486	-39'023	65 1174	9'9	9	-57'341	+37'374			10	-40'749	+61'497	63 1257	8'2	12	-22'169	+ 7'233	64 1156	9'9
10	+26'606	- 9'665	65 1173	9'9	10	-56'175	+ 9'980	64 1131	9'9	9	-40'712	+62'217			10	-21'861	+39'928		
9	+27'245	-61'266			44	-56'145	+59'043	63 1233	8'0	9	-40'691	+28'216			9	-21'839	+59'881		
9	+27'919	-35'668			9	-54'820	+30'720			10	-40'603	+28'260	64 1146	9'9	9	-21'771	+27'078		
15	+28'202	-41'673	65 1176	9'6	9	-54'799	+15'517			9	-40'086	+ 1'166			9	-21'722	+47'178		
11	+28'252	-34'244	65 1175	9'9	9	-54'660	+15'229			9	-39'592	+17'991			9	-21'531	+59'173		
	261					21					81					141			
13	+29'406	-40'105	65 1177	9'6	10	-54'133	+ 8'747			9	-38'955	+14'527			9	-21'455	+50'665		
17	+30'922	-61'640	65 1180	9'6	9	-53'859	+58'897			9	-38'625	+ 4'933			9	-21'068	+11'068		
14	+31'442	-13'311	65 1179	9'6	9	-53'754	+ 4'890			9	-37'926	+19'085			10	-20'853	+49'042		
11	+32'425	-57'682	65 1181	9'6	9	-53'508	+49'482			9	-37'774	+22'345			9	-20'721	+24'137		
9	+33'090	-43'586			11	-53'361	+39'017	64 1132	9'9	10	-37'625	+45'620			9	-20'537	+46'632		
11	+35'550	-34'370	65 1182	9'6	9	-53'043	+11'225			10	-36'944	+33'240			10	-20'459	+ 0'276		
9	+36'641	-63'578			9	-51'983	+38'281			14	-36'859	+39'724	64 1147	9'6	9	-20'437	+55'939		
16	+37'737	-21'335	65 1183	9'3	9	-51'909	+36'093			9	-36'637	+60'077			10	-20'295	+23'709		
12	+38'427	-46'023	65 1185	9'9	9	-51'885	+15'721			9	-36'600	+ 4'662			9	-20'115	+54'380		
9	+38'429	-39'679			22	-51'608	+42'761	64 1133	9'0	9	-35'560	+21'981			9	-19'725	+ 3'118		
	271					31					91					151			
9	+38'498	-51'879			11	-51'343	+59'596	63 1240	9'8	9	-35'200	+23'462			9	-19'616	+ 0'022		
10	+42'585	-53'900	65 1186	9'9	9	-50'980	+ 7'460			9	-34'938	+51'725			9	-19'537	+10'120		
9	+46'015	-56'684			11	-50'432	+30'775	64 1134	9'0	9	-33'405	+12'025			9	-19'502	+33'612		
18	+48'511	-21'265	65 1187	9'5	12	-49'696	+57'170	63 1244	9'7	9	-33'018	+51'973			9	-19'335	+58'379		
9	+52'256	-37'461			9	-49'618	+42'912			9	-32'783	+12'333			9	-19'278	+42'535		
10	+52'354	-40'422			9	-48'989	+ 1'249			9	-32'651	+21'581			9	-19'189	+34'518		
11	+53'464	-40'175	65 1188	9'9	14	-48'970	+42'666	64 1136	9'4	9	-32'338	+21'471			12	-18'721	+52'210	64 1158	9'9
16	+53'485	-57'920	65 1189	9'4	9	-48'849	+57'246			9	-32'095	+ 6'484	64 1148	9'9	9	-18'695	+40'785		
18	+54'707	-31'624	65 1190	9'4	9	-48'740	+11'183			9	-32'069	+19'196			20	-18'663	+ 6'444	64 1157	9'2
9	+56'345	-49'659	65 1191	9'6	9	-48'399	+ 3'400			11	-31'753	+61'781	63 1263	9'9	18	-17'841	+40'005	64 1159	9'5
	281					41					101					161			
10	+57'580	-42'034	65 1192	9'9	9	-48'315	+ 5'123			9	-31'497	+17'011			9	-17'617	+47'890		
9	+57'947	-30'743	65 1193	9'9	11	-48'219	+29'634	64 1137	9'8	9	-31'386	+39'654			9	-17'409	+ 1'891		
11	+61'297	-64'655	65 1195	9'6	9	-48'092	+14'255			9	-31'280	+54'882			9	-17'385	+32'332		
15	+61'311	-45'706	65 1194	9'4	9	-47'825	+ 2'902			9	-31'275	+14'511			9	-17'279	+60'936		
10	+63'523	-33'053	65 1197	9'9	9	-47'805	+12'569			9	-31'111	+61'847			19	-16'723	+ 5'760	64 1160	9'2
14	+63'776	-11'874	65 1196	9'5	10	-47'153	+33'951	64 1139	9'9	9	-30'091	+54'606			9	-16'594	+38'944		
9	+64'231	-19'880			9	-47'071	+12'035			9	-29'710	+ 6'852			9	-16'547	+15'207		
15	+64'272	-19'032	65 1198	9'4	9	-47'051	+21'034			9	-29'523	+42'523			10	-16'467	+59'500	63 1275	9'9
					9	-46'559	+ 7'843			9	-29'265	+19'730			9	-16'083	+33'098		
					10	-46'256	+10'868			9	-29'131	+10'142			9	-15'876	+10'832		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
11	171,				22	231,				291,					351,					
9	-15°856	+2°030			9	-4°178	+49°165	64	1177	9°0	9	+9°696	+26°227	63	1291	9°6	9	+23°510	+27°714	
10	-15°701	+23°987			10	-3°746	+19°078			16	+10°046	+62°708			9	+23°839	+49°520			
9	-15°479	+31°565			9	-3°305	+41°190			9	+10°289	+31°961			9	+23°921	+23°579			
9	-15°417	+19°293			9	-3°230	+43°133			9	+10°432	+35°606			16	+24°080	+18°634	64	1194	
9	-15°389	+47°128			15	-3°085	+0°985	64	1178	9°6	9	+10°729	+24°159			32	+24°395	+58°927	63	1311
10	-14°835	+35°367			9	-2°961	+37°106			9	+10°831	+21°763			9	+24°423	+11°629			
9	-14°622	+33°039			9	-2°930	+23°664			9	+11°312	+22°181			9	+24°458	+57°426			
20	-14°390	+43°395	64	1161	9°0	9	-2°532	+44°065			9	+11°607	+56°723			9	+24°859	+1°835		
19	-14°315	+53°044	64	1162	9°3	9	-2°058	+41°572			17	+12°009	+54°033	63	1296	9°2	9	+24°932	+36°818	
9	-14°125	+21°709			9	-1°385	+25°738			10	+12°173	+23°695			15	+25°516	+6°331	64	1197	
	181					241					301					361				
12	-13°578	+33°762	64	1164	9°9	15	-1°192	+12°103	64	1179	9°8	18	+12°184	+54°129		16	+25°520	+64°499	63	1312
12	-13°575	+20°711	64	1163	9°9	9	-1°011	+17°363			9	+13°501	+22°801			9	+25°688	+7°751		
9	-13°248	+35°501			9	-0°858	+57°999			18	+13°568	+15°973	64	1187	9°4	18	+25°707	+41°104	64	1195
12	-13°165	+42°494	64	1165	9°7	9	-0°732	+35°167			9	+13°833	+27°241			15	+25°779	+34°278	64	1196
9	-12°876	+21°249			9	+0°078	+44°750			9	+14°328	+29°506			21	+26°005	+54°738	63	1313	
10	-12°840	+56°734			10	+0°165	+43°318			9	+14°543	+52°336			35	+26°005	+20°615	64	1198	
9	-12°740	+43°072			9	+0°288	+29°358			12	+14°609	+50°925	64	1188	9°9	10	+26°210	+7°795		
10	-12°674	+13°614			9	+0°536	+14°470			9	+14°667	+47°065			9	+26°268	+38°467			
24	-12°638	+44°844	64	1166	9°0	9	+0°564	+53°358			10	+15°217	+28°931			9	+26°725	+43°860		
12	-12°560	+15°113	64	1167	9°9	15	+0°645	+31°056	64	1180	9°9	10	+15°511	+7°195		9	+26°768	+13°923		
	191					251					311					371				
9	-12°182	+42°561			9	+0°696	+44°501			9	+15°922	+15°393			9	+26°875	+50°285			
11	-11°638	+28°398			36	+0°734	+15°277	64	1181	8°2	18	+16°007	+13°951	64	1189	9°4	15	+27°305	+19°271	
24	-11°630	+63°936	63	1279	9°1	9	+0°758	+43°953			9	+16°239	+13°985			9	+27°516	+18°958		
9	-11°555	+26°722			12	+0°948	+50°818	64	1182	9°9	9	+16°371	+40°828			10	+27°737	+24°903		
9	-11°408	+42°835			9	+0°962	+25°711			9	+17°336	+38°255			9	+27°798	+24°851			
9	-10°637	+31°576			9	+1°110	+58°457			9	+17°653	+21°309			9	+28°457	+10°877			
10	-10°154	+36°729			9	+1°160	+25°428			9	+17°749	+15°401			9	+29°133	+51°909			
9	-9°886	+7°500			11	+1°647	+48°918	64	1183	9°9	9	+17°984	+40°690			9	+29°439	+30°115		
9	-9°854	+38°885			9	+1°732	+31°821			9	+18°455	+46°392			9	+29°575	+3°830			
9	-9°561	+0°561			9	+2°126	+46°912			9	+18°520	+38°219			10	+29°716	+29°176			
	201					261					321					381				
9	-9°445	+39°014			9	+2°299	+55°703			9	+18°615	+19°933			10	+29°833	+60°258			
9	-9°390	+44°416			9	+2°429	+35°094			9	+18°663	+52°094			9	+30°471	+31°289			
9	-9°128	+0°050			9	+2°536	+39°981			9	+18°977	+15°610			9	+31°355	+26°749			
9	-8°995	+58°795			9	+2°706	+6°606			9	+19°249	+2°550			10	+31°770	+12°183			
9	-8°890	+61°072			10	+3°206	+39°896			10	+19°390	+25°121			9	+32°290	+9°396			
9	+8°772	+24°445			9	+3°278	+37°820			9	+19°552	+32°081			9	+32°740	+5°469			
9	+8°595	+2°224			9	+3°476	+40°413			9	+19°799	+50°588			9	+32°889	+4°224			
9	+8°558	+56°127			1	+4°111	+3°358			9	+19°886	+63°888			9	+33°006	+15°807			
9	+8°476	+31°921			12	+4°220	+53°014	64	1184	9°9	9	+20°059	+47°053			9	+33°066	+40°036		
48	+8°446	+50°915	64	1168	7°1	18	+4°312	+36°098	64	1185	9°2	9	+20°103	+51°058		10	+33°119	+25°005		
	211					271					331					391				
9	+8°049	+54°466			9	+4°417	+23°916			10	+20°185	+44°210			9	+33°170	+36°800			
9	+8°038	+24°619			9	+4°523	+41°249			9	+20°225	+45°067			9	+33°296	+2°182			
9	+7°836	+19°001			9	+4°627	+11°172			9	+20°292	+18°447			9	+33°350	+41°712			
9	+7°596	+41°160			11	+5°058	+53°621			9	+20°314	+32°381			9	+33°661	+25°719			
20	+7°549	+11°428	64	1169	9°4	9	+5°788	+59°139			10	+20°770	+28°384			9	+34°813	+34°549		
10	+7°180	+31°881			9	+5°912	+7°195			17	+20°843	+45°356	64	1191	9°4	9	+35°559	+20°519		
20	+6°852	+33°158	64	1170	9°2	11	+6°113	+50°491	64	1186	9°9	10	+21°356	+22°293		9	+35°600	+5°741		
15	+6°792	+25°443			9	+6°643	+26°945			10	+21°575	+29°277			9	+35°745	+0°605			
9	+6°697	+29°054	64	1171	9°6	9	+7°184	+64°330			9	+21°648	+15°776			9	+35°823	+10°480		
11	+6°482	+48°588	64	1172	9°9	11	+7°421	+1°732			9	+21°823	+52°848			12	+35°867	+51°010	64	1202
	221					281					341					401				
9	+6°233	+14°387			10	+7°639	+57°391			9	+21°993	+52°646			24	+35°881	+29°341	64	1204	
9	+6°025	+44°382			26	+7°807	+54°802			19	+22°139	+48°519	64	1192	9°2	12	+36°395	+11°488	64	1205
12	+5°896	+50°796	64	1173	9°9	10	+8°417	+52°279			9	+22°237	+21°031			9	+36°883	+13°346		
9	+5°676	+41°998			9	+8°614	+6°958			9	+22°240	+35°184			9	+36°910	+45°306			
9	+4°614	+10°472			9	+8°868	+30°976			9	+22°455	+36°853			9	+37				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.					No.	Mag.
	411,					471,					531,					591,			
9	+39°745	+17°048			9	+58°573	+28°090			10	-42°182	-29°755			11	-22°709	-46°447		
9	+40°409	+10°409			9	+58°580	+2°914			9	-41°589	-29°497			9	-22°614	-50°733		
19	+40°434	+7°466	64 1206	9.5	10	+58°787	+27°258			9	-41°412	-32°307			10	-22°254	-12°323		
9	+41°180	+3°495			9	+58°791	+23°780			12	-41°408	-39°034	65 1209	9.9	9	-21°916	-5°136		
9	+41°292	+1°670			15	+58°859	+12°426	64 1226	9.5	10	-41°248	-12°291			9	-21°898	-50°587		
9	+41°627	+18°603			9	+59°005	+2°604			54	-41°154	-30°994	65 1210	7.9	12	-21°858	-19°788		
9	+41°672	+35°743			20	+59°271	+24°128	64 1225	9.0	9	-40°993	-1°844			13	-21°757	-34°083		
10	+41°924	+42°970			12	+60°100	+47°774	64 1224	9.4	19	-40°870	-12°073	65 1211	9.5	54	-21°540	-28°443	65 1224	7.6
9	+43°155	+7°971			12	+60°604	+29°696	64 1227	9.9	10	-40°530	-34°319			9	-20°953	-2°582		
9	+43°492	+16°371			9	+60°627	+12°048			9	-40°479	-55°875			13	-20°542	-16°574	65 1225	9.9
	421					481					541					601			
24	+43°524	+38°005	64 1209	8.8	9	+60°685	+23°073			10	-40°351	-22°240			9	-20°057	-6°941		
9	+43°829	+16°831			15	+62°411	+45°380	64 1228	9.2	17	-40°314	-15°130	65 1212	9.6	11	-19°730	-27°896		
9	+43°910	+2°049			9	+62°653	+1°990			9	-40°141	-11°243			25	-19°163	-62°498	65 1226	9.2
9	+43°922	+2°467			9	+64°267	+15°811			11	-39°965	-8°742			9	-19°081	-13°376		
9	+43°953	+18°629			9	-63°960	-6°845			10	-39°904	-36°189			11	-18°078	-41°716		
9	+43°964	+45°810			9	-62°100	-25°791			9	-39°357	-19°514			18	-17°519	-24°848	65 1227	9.5
9	+44°003	+2°252			9	-61°716	-3°372			34	-37°854	-52°964	65 1213	8.8	14	-17°368	-37°096		
9	+44°029	+11°467			9	-60°693	-37°618			9	-37°469	-36°922			11	-17°099	-3°517		
9	+44°271	+10°286			9	-60°401	-40°571			11	-37°310	-27°359			9	-17°065	-21°503		
9	+44°431	+18°740			11	-59°295	-40°246	65 1188	9.9	35	-36°472	-33°353	65 1214	8.9	10	-16°615	-38°486		
	431					491					551					611			
10	+44°808	+39°714			18	-58°672	-31°629	65 1190	9.4	11	-36°056	-35°851			24	-16°493	-12°571	65 1228	9.2
11	+44°842	+39°827	64 1211	9.4	13	-58°044	-57°951	65 1189	9.4	11	-35°264	-42°965			9	-16°031	-58°663		
9	+44°955	+7°468			9	-57°870	-20°576			34	-34°553	-48°558	65 1215	8.6	15	-15°856	-10°569		
18	+45°048	+50°570	64 1210	9.4	9	-57°804	-7°115			9	-33°987	-57°044			17	-15°807	-35°930	65 1229	9.9
15	+45°174	+8°015			9	-57°587	-2°798			9	-33°978	-6°957			9	-15°803	-1°725		
9	+45°349	+10°469			9	-57°242	-41°430			18	-33°828	-49°414	65 1216	9.5	9	-15°315	-56°059		
9	+45°385	+34°915			9	-56°320	-16°802			9	-33°810	-39°334			9	-14°720	-47°384		
50	+45°487	+19°316	64 1212	7.2	11	-55°766	-49°504	65 1191	9.6	11	-33°496	-39°084			9	-14°600	-18°797		
12	+45°848	+32°916	64 1213	9.9	9	-55°480	-43°178			26	-32°986	-51°278	65 1217	9.2	14	-14°596	-3°800		
9	+46°806	+19°847			11	-55°464	-30°526	65 1193	9.9	9	-32°947	-19°714			13	-12°947	-55°633	65 1231	9.9
	441					501					561					621			
9	+46°940	+2°307			11	-55°155	-2°194			9	-32°705	-51°562			10	-12°545	-33°610		
9	+47°773	+27°792			10	-55°080	-41°812	65 1192	9.9	28	-32°651	-57°845	65 1218	9.2	11	-12°368	-37°662		
9	+47°976	+11°323			9	-54°392	-85°112			9	-32°378	-11°807			9	-11°709	-4°580		
9	+48°146	+30°766			9	-52°918	-38°914			9	-31°939	-54°764			13	-11°150	-21°415		
9	+48°311	+4°885			9	-51°716	-25°907			9	-31°894	-64°004			18	-10°826	-51°176	65 1232	9.6
9	+49°192	+3°212			16	-51°102	-45°226	65 1194	9.4	12	-31°780	-12°015			9	-10°699	-25°509		
18	+49°941	+22°110	64 1214	9.2	19	-50°973	-11°283	65 1196	9.5	9	-31°708	-4°198			9	-9°773	-8°971		
24	+50°005	+17°404	64 1216	8.9	10	-50°676	-11°517			10	-31°624	-55°512			9	-9°694	-52°607		
15	+50°117	+0°918	64 1217	9.6	20	-50°060	-18°401	65 1198	9.4	9	-31°551	-3°167			9	-9°647	-0°608		
10	+50°350	+13°050			10	-49°967	-19°240			9	-30°926	-6°707			21	-9°432	-23°044	65 1233	9.3
	451					511					571					631			
9	+50°631	+16°987			12	-49°803	-64°101	65 1195	9.6	18	-29°689	-32°877	65 1219	9.5	9	-7°528	-36°749		
9	+50°809	+39°253			13	-49°750	-32°437	65 1197	9.9	9	-28°511	-10°393			12	-5°420	-31°576		
9	+50°999	+39°901			9	-48°091	-28°647			9	-28°502	-51°296			9	-5°315	-15°869		
19	+51°710	+8°322	64 1220	9.5	9	-47°937	-26°131			9	-26°881	-7°683			17	-5°028	-36°012	65 1235	9.9
18	+51°811	+27°190	64 1218	9.5	22	-47°919	-6°846	64 1135	9.5	20	-26°708	-2°768	64 1154	9.4	9	-4°745	-62°394		
12	+52°087	+34°968	64 1219	9.9	10	-47°419	-26°869			9	-26°665	-38°631			9	-4°346	-19°021		
9	+52°793	+19°602			9	-47°332	-61°521			15	-26°608	-23°151	65 1220	9.9	9	-4°251	-61°905		
24	+53°119	+0°380	64 1222	8.8	35	-46°778	-27°586	65 1201	8.7	9	-26°492	-39°559			9	-4°005	-12°092		
9	+53°458	+0°525			19	-46°648	-9°119	65 1202	9.5	9	-26°457	-7°053			9	-3°965	-28°758		
9	+53°548	+2°966			19	-46°427	-1°179	64 1138	9.5	10	-26°198	-10°531			9	-3°936	-38°332		
	461					521					581					641			
17	+54°077	+27°226	64 1221	9.7	13	-46°346	-50°345	65 1200	9.6	9	-25°912	-8°097			11	-3°886	-25°779		
9	+54°611	+33°270			15	-45°873	-25°172	65 1203	9.8	9	-25°888	-50°171			9	-3°811	-10°270		
9	+54°875	+20°718			9	-45°650	-24°216			9	-25°541	-14°519			12	-3°266	-25°054		
9	+55°124	+6°902			9	-45°488	-63°439			11	-25°322	-29°893			23	-3°188	-64°465	65 1236	9.3
30	+55°322	+57°120	63 1344	8.0	13	-44°499	-49°018	65 1204	9.6	18	-25°231	-0°943	64 1155	9.6	11	-2°666	-50°767		
9	+55°597	+34°218			19	-43°948	-23°487	65 1206	9.4	9	-25°189	-53°299			9	-2°430	-29°182		
9	+56°054	+52°006			19	-43°802	-37°994	65 1205	9.5	17	-24°977	-32°349	65 1221	9.6	9	-2°040	-28°576		
9	+56°779	+13°339			12	-42°754	-20°295	65 1207	9.9	22	-24°205	-12°685	65 1222	9.3	35	-1°818	-40°364	65 1237	8.6
10	+57°180	+4°380	64 1223	9.9	13	-42°555	-18°630	65 1208	9.9	32	-23°906	-20°798	65 1223	9.0	9	-1°672	-18°425		
9	+57°628	+8°224			9	-42°462	-34°115			9	-23°073	-31°304			19	-1°636	-17°943	65 1238	9.2

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651,					711,					771,					831,			
17	- 1°561	-36°018	65 1239	9·9	9	+18°089	-53°192			11	+32°625	-35°098			9	+47°436	-15°283		
15	- 1°535	-59°429			9	+18°276	-14°850			10	+33°039	-35°210			100	+47°488	-53°993	65 1273	6·2
14	- 1°360	-28°690	65 1240	9·9	52	+18°289	- 1°816	64 1190	7·4	19	+33°409	-34°223	65 1264	9·6	9	+47°612	-20°723		
11	- 1°074	-30°072			14	+18°355	-56°924	65 1249	9·9	11	+33°573	-37°060			11	+48°238	-57°927	65 1275	9·8
10	- 0°739	-16°661			56	+18°427	-19°863	65 1248	7·2	19	+34°453	- 1°362	64 1201	9·6	9	+48°347	-38°892		
11	- 0°598	-45°300			9	+18°639	- 6°222			9	+34°468	-54°914			17	+48°448	-24°769	65 1274	9·8
9	+ 0°268	- 7°444			18	+19°257	-20°395	65 1250	9·6	17	+34°583	- 1°006	64 1203	9·9	9	+48°458	-55°409		
12	+ 1°253	-57°340			9	+19°457	- 1°001			13	+34°657	- 8°472			18	+48°744	- 8°431	65 1272	9·9
9	+ 1°787	- 1°604			9	+19°609	-11°715			13	+35°004	- 2°626			11	+49°328	-34°495		
13	+ 1°820	-37°448			11	+19°897	-10°809			14	+35°122	- 6°368			23	+49°380	- 0°226	64 1215	9·5
	661					721					781					841			
14	+ 1°956	-21°215			9	+19°925	-44°680			9	+35°363	-34°246			9	+50°051	-10°075		
20	+ 2°236	-31°516	65 1241	9·4	9	+20°405	-64°659			9	+35°854	- 5°560			13	+50°147	-49°564	65 1278	9·6
9	+ 2°442	-44°482			9	+20°833	-38°678			10	+37°018	-14°389			48	+50°159	-13°567	65 1276	7·7
11	+ 2°842	-45°694			24	+20°993	-18°776	65 1251	9·0	9	+37°295	-58°849			35	+50°203	-13°467		
9	+ 2°863	- 5°084			10	+21°006	-58°057			9	+37°425	- 0°541			15	+50°890	-19°642	65 1277	9·9
9	+ 3°014	-26°153			19	+21°067	-51°129	65 1252	9·6	10	+37°445	-50°427			9	+51°347	-41°208		
10	+ 3°500	-12°041			16	+21°276	-40°684	65 1253	9·9	9	+38°880	- 1°294			9	+52°548	-15°502		
9	+ 3°608	- 5°812			9	+21°500	-31°227			9	+38°904	-29°797			11	+52°713	-31°483		
13	+ 4°536	-64°539	65 1242	9·7	9	+22°048	-26°387			9	+38°907	-33°444			10	+52°825	-19°870		
9	+ 4°576	-27°568			18	+22°111	-62°070	65 1254	9·4	11	+39°361	-26°095			9	+53°058	-11°338		
	671					731					791					851			
9	+ 5°227	-64°191			9	+22°721	-22°721			9	+39°582	-13°646			10	+53°075	-18°463	65 1279	9·9
10	+ 5°229	-61°884			14	+22°796	-47°694	65 1255	9·8	32	+39°583	-42°233	65 1265	8·7	14	+53°111	-18°242		
9	+ 5°528	-37°397			9	+22°823	-57°665			9	+39°517	-24°147			9	+53°427	-22°489		
9	+ 5°624	- 9°290			9	+23°431	-36°054			12	+39°644	-59°832	65 1266	9·9	13	+53°549	- 7°080		
9	+ 5°971	- 0°026			9	+24°009	-56°671			9	+39°671	-33°248			9	+53°606	- 7°375		
12	+ 6°184	- 5°535			9	+24°511	-33°190			9	+40°263	-32°123			10	+53°813	- 8°169		
22	+ 6°464	-49°444	65 1243	9·4	10	+24°560	-11°183			20	+40°327	-41°049	64 1207	9·9	9	+54°713	-14°360		
9	+ 6°509	- 6°336			9	+24°691	-42°085			19	+40°546	- 6°562	64 1208	9·8	10	+54°763	- 7°044		
10	+ 7°135	-60°958			15	+24°721	-63°865	65 1256	9·5	9	+40°605	-38°895			9	+54°925	- 3°827		
9	+ 7°722	- 3°439			11	+25°611	-56°426	65 1257	9·9	9	+40°642	- 0°879			23	+55°591	-17°516	65 1280	9·2
	681					741					801					861			
10	+ 7°862	-42°676			9	+25°640	-11°928			46	+40°972	-48°628	65 1267	8·0	9	+56°627	-38°232		
27	+ 7°964	-49°776	65 1244	8·9	9	+25°797	- 5°392			9	+41°344	-46°404			24	+57°447	-19°054	65 1281	9·2
10	+ 8°138	-32°611			9	+25°805	-13°373			9	+41°583	-27°205			9	+58°629	-53°438		
18	+ 8°296	-13°984	65 1245	9·8	22	+25°907	- 1°676	64 1199	9·4	9	+41°597	- 3°371			19	+58°721	-28°017	65 1282	9·6
9	+ 8°344	-63°322			10	+26°086	- 5°487			9	+41°661	-36°981			9	+59°336	-19°507		
9	+ 9°916	-34°827			9	+26°246	-44°349			11	+42°082	-63°097	65 1268	9·9	11	+59°553	- 3°450		
9	+10°289	-16°880			13	+26°367	-52°031	65 1258	9·9	9	+42°127	- 6°246			9	+60°776	-28°031		
9	+10°347	-48°952			11	+26°664	-28°646			9	+42°221	-12°215			39	+60°911	-33°205	65 1283	8·9
14	+10°568	-37°933			9	+26°994	-26°413			11	+42°226	-11°305			9	+61°927	-12°717		
9	+11°031	-61°085			12	+27°084	- 2°046			11	+42°785	-58°393			22	+61°983	- 9°568	65 1284	9·4
	691					751					811					871			
9	+11°063	- 8°732			20	+27°547	-38°770	65 1260	9·6	9	+42°989	-26°168			11	+62°245	- 8°982	65 1285	9·9
22	+11°279	-62°354	65 1246	9·2	9	+28°082	-33°799			11	+43°356	-10°220			11	+63°535	- 3°690		
9	+11°287	-52°820			9	+28°095	-48°948			18	+43°397	-30°485	65 1269	9·6	11	+64°104	-22°476		
9	+11°526	-47°721			9	+28°354	-55°582			18	+43°547	-47°881	65 1270	9·4	18	+64°771	- 3°120	64 1229	9·5
9	+12°160	-40°382			10	+28°424	-40°733			9	+43°855	-21°307							
9	+12°307	-12°444			11	+28°538	-12°599			9	+44°248	-36°325							
9	+12°427	-18°942			9	+28°829	-44°158			9	+44°832	-16°040							
9	+12°552	-27°021			12	+30°605	-40°364			9	+45°106	-26°411							
9	+12°662	-35°247			40	+30°708	-31°591	65 1261	8·5	16	+45°243	- 4°665							
9	+13°087	-19°305			10	+31°197	- 3°261			9	+45°273	-58°096							
	701					761					821								
9	+13°228	-34°555			9	+31°233	-21°131			9	+45°792	-51°661							
9	+13°415	- 7°182			9	+31°246	-50°939			9	+45°917	-57°437	65 1271	9·9					
10	+13°571	-16°365			9	+31°543	-47°417			9	+45°994	-45°804							
18	+13°778	-49°690	65 1247	9·6	10	+31°916	-31°452			9	+46°154	-12°562							
9	+14°007	-41°695			9	+31°929	-36°616			9	+46°235	-39°556							
10	+14°077	-19°759			17	+31°929	-46°315	65 1262	9·8	9	+46°292	-41°549							
10	+14°359	-26°650			9	+31°954	-40°374			11	+46°702	- 7°317							
9	+14°555	-37°225			11	+31°964	-42°072			10	+46°775	-12°665							
10	+17°307	-11°206			11	+32°277	-25°136			9	+46°844	-10°960							
9	+17°512	- 7°516			9	+32°517	- 1°334			9	+47°222	-12°237							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 10h 21m, - 65°.					51,					111,					171,				
Plate 214. 1892, March 19.																			
PROVISIONAL CONSTANTS.																			
a = - .01167 d = + .00191																			
b = - .00189 e = - .01156																			
c = - .0138 f = - .0436																			
To obtain standard co-ordinates, ξ, η																			
ξ = x + ax + by + c																			
η = y + dx + ey + f																			
17	-64.314	+ 8.045	64 1220	9.5	9	-38.018	+17.741			9	-21.102	+57.551			9	+ 1.347	+25.128		
36	-64.174	+56.972	63 1344	8.0	9	-37.465	+17.506			9	-20.787	+ 0.635			22	+ 1.519	+16.939	64 1273	8.7
12	-63.294	+27.060	64 1221	9.7	9	-37.205	+13.969			9	-20.240	+31.340			9	+ 1.789	+ 3.114	64 1274	9.8
9	-63.200	+33.125			9	-36.364	+51.922			9	-19.998	+32.822			9	+ 2.882	+36.805	64 1275	9.8
9	-63.079	+51.935			9	-36.010	+ 5.164			9	-19.730	+ 1.673			9	+ 3.757	+25.001	64 1276	9.9
20	-62.329	+ 0.221	64 1222	8.8	9	-35.974	+47.492			9	-19.605	+44.662			10	+ 3.829	+28.881	64 1277	9.4
9	-62.086	+ 2.834			9	-35.877	+12.105			9	-19.079	+ 8.436			16	+ 4.412	+51.558	64 1278	9.2
9	-62.044	+20.620			9	-35.638	+47.540			9	-19.044	+40.172			9	+ 4.706	+25.125	64 1279	9.9
9	-58.876	+28.224			17	-35.626	+49.750	64 1243	9.3	9	-18.404	+49.894			14	+ 4.732	+11.795	64 1280	9.4
15	-58.727	+47.986	64 1224	9.4	9	-35.478	+46.474			9	-18.207	+15.123			9	+ 4.798	+31.770		
9	-58.608	+27.428			71					131					191				
9	-58.571	+ 4.502	64 1223	9.9	9	-35.358	+47.061			40	-18.151	+18.686	64 1252	7.5	9	+ 5.373	+47.086	64 1281	9.8
9	-58.339	+23.960			9	-35.305	+15.796			9	-18.027	+34.832			9	+ 5.555	+12.430		
20	-57.893	+24.340	64 1225	9.0	17	-35.195	+53.237	63 1363	9.2	9	-17.996	+34.365			9	+ 5.718	+39.354		
14	-57.469	+12.654	64 1226	9.5	9	-34.949	+14.903			9	-17.555	+ 4.704			17	+ 7.203	+36.519	64 1282	9.2
9	-57.083	+ 3.140			9	-34.693	+18.409			14	-17.439	+62.708	63 1372	9.6	11	+ 8.138	+41.986	64 1283	9.3
12	-56.966	+29.988	64 1227	9.9	11	-34.550	+41.160			17	-17.249	+51.011	64 1253	9.5	11	+ 8.432	+14.556	64 1284	9.5
9	-56.634	+ 2.858			9	-34.322	+45.517			9	-17.120	+43.209			18	+ 8.878	+26.884	64 1285	9.0
9	-56.416	+23.396			9	-34.213	+ 2.432			9	-16.913	+ 7.038			9	+ 9.331	+49.455	64 1286	9.9
18	-56.269	+45.767	64 1228	9.2	9	-34.193	+14.851			9	-16.790	+27.772			9	+ 9.762	+ 7.176		
21					14	-33.790	+51.218	64 1246	9.4	9	-16.212	+53.880			9	+10.635	+20.311		
9	-55.691	+12.391			81					141					201				
9	-55.332	+14.613			9	-33.665	+ 4.358			10	-16.009	+23.001			9	+12.493	+30.530	64 1287	9.9
9	-54.191	+15.521			10	-33.537	+10.047			9	-15.335	+28.176			9	+12.567	+11.756		
11	-53.545	+60.471	63 1349	9.6	14	-33.500	+27.733	64 1245	9.7	9	-15.255	+16.483			12	+12.599	+41.094	64 1288	9.5
9	-53.525	+54.800			9	-33.353	+17.729			9	-14.822	+ 0.494	64 1256	9.9	9	+14.254	+45.009	64 1289	9.8
9	-52.956	+ 2.507			27	-33.248	+ 6.413	64 1244	8.7	9	-14.705	+25.227			24	+14.543	+39.720	64 1290	8.6
9	-52.323	+16.409			18	-33.113	+61.543	63 1365	9.2	10	-14.472	+ 0.718			9	+14.695	+24.023	64 1291	9.9
10	-51.113	+39.121	64 1230	9.7	9	-33.094	+38.348			9	-14.290	+33.746			12	+14.777	+ 5.270	64 1292	9.5
9	-51.071	+54.916			54	-33.078	+49.892	64 1248	6.0	9	-14.017	+27.150			15	+14.962	+60.104	63 1410	9.4
9	-50.489	+13.706			9	-32.803	+ 5.204			9	-13.965	+21.878			18	+15.825	+43.210	64 1293	9.1
31					11	-32.729	+ 9.239	64 1247	9.9	9	-13.741	+39.883			9	+16.348	+12.191		
18	-50.294	+37.929	64 1232	9.2	91					151					211				
9	-50.105	+17.903			9	-32.454	+53.152			9	-13.383	+36.913			9	+16.355	+50.690	64 1294	9.7
15	-49.732	+48.788	64 1233	9.6	9	-32.314	+26.164			9	-12.986	+35.306			9	+16.687	+28.562		
9	-48.911	+52.873			9	-31.783	+ 4.228			9	-11.936	+ 2.996			9	+17.058	+42.287	64 1295	9.8
9	-47.457	+12.803			10	-30.848	+10.909			9	- 9.806	+22.922			9	+17.685	+59.447	63 1415	9.7
9	-46.909	+ 4.723			10	-30.840	+10.078	64 1249	9.9	9	- 9.621	+14.405			9	+18.087	+32.613		
9	-46.041	+ 1.350			9	-30.653	+ 8.131			9	- 9.544	+56.430			9	+18.203	+ 1.218		
12	-45.917	+32.741	64 1235	9.9	9	-30.293	+54.984	63 1367	9.8	9	- 8.835	+24.769			10	+18.492	+14.159	64 1298	9.6
9	-45.449	+ 0.430			9	-30.289	+17.037			9	- 8.466	+35.712	64 1259	9.8	9	+18.592	+41.156	64 1296	9.6
9	-45.165	+31.273			9	-29.313	+14.824			9	- 8.439	+35.950	64 1260	9.7	17	+19.020	+62.432	63 1416	9.1
41					9	-28.743	+35.259			9	- 6.844	+18.401			9	+19.381	+42.090		
9	-45.105	+20.891			101					161					221				
9	-44.815	+32.698			9	-28.587	+11.625			9	- 4.344	+15.936			36	+19.425	+28.515	64 1299	8.3
17	-43.914	+28.476	64 1236	9.5	9	-28.512	+ 0.830			10	- 3.538	+30.366	64 1261	9.8	9	+20.190	+60.861	63 1418	9.9
9	-43.647	+25.398			32	-28.394	+22.020	64 1250	8.2	24	- 3.480	+29.056	64 1262	8.9	21	+21.405	+40.100	64 1300	8.9
9	-43.421	+25.322			9	-28.083	+10.404			9	- 3.384	+ 1.558	64 1264	9.8	9	+23.039	+ 2.223		
9	-43.013	+16.404			9	-27.837	+ 2.922			9	- 3.368	+ 0.881	64 1263	9.8	15	+23.343	+21.849	64 1301	9.4
9	-42.782	+ 0.202			9	-27.213	+38.459			9	- 3.028	+43.542			9	+23.422	+ 8.807		
11	-42.369	+26.660	64 1237	9.9	9	-27.034	+32.088			9	- 2.692	+44.602	64 1265	9.8	16	+23.901	+ 2.945	64 1304	9.2
10	-42.089	+37.032	64 1239	9.9	9	-26.887	+18.461			9	- 2.516	+ 0.934			9	+24.244	+13.189		
9	-41.889	+29.707			9	-26.387	+10.672			9	- 2.354	+ 2.372	64 1266	9.9	32	+24.269	+36.380	64 1303	8.6
9	-41.889	+29.707			11	-25.404	+28.742			9	- 2.146	+53.331	63 1384	9.9	11	+24.334	+19.172	64 1305	9.5

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
26	+25.261	+47.858	64 1306	9.0	14	+64.074	+16.343	64 1345	9.2	9	-42.680	-49.606			11	-18.511	-36.024	65 1308	9.9
12	+25.857	+60.855	63 1435	9.5	9	+64.853	+31.705	64 1346	9.8	9	-41.278	-27.243			19	-17.623	-37.928	65 1309	9.5
9	+26.603	+33.269			28	-64.313	-13.911	65 1276	7.7	14	-41.054	-41.876	65 1292	9.6	9	-17.557	-6.359		
17	+27.581	+6.098	64 1307	9.2	24	-64.273	-13.799			9	-41.040	-11.371			9	-16.533	-38.244		
9	+28.240	+0.424			80	-64.097	-54.417	65 1273	6.2	11	-40.536	-63.068	65 1293	9.6	10	-10.441	-5.161		
10	+28.259	+26.001	64 1308	9.5	9	-63.647	-34.831			11	-39.591	-4.305			18	-15.959	-36.598	65 1310	9.4
24	+29.569	+55.406	63 1439	9.0	11	-63.137	-19.902	65 1277	9.9	9	-39.566	-20.707			9	-15.946	-18.960		
9	+30.103	+6.302	64 1309	9.7	9	-63.073	-58.284	65 1275	9.8	10	-39.174	-36.415			18	-15.735	-8.674	65 1311	9.6
9	+30.413	+29.407			9	-62.126	-30.202			9	-39.072	-28.809			10	-15.685	-13.185		
36	+31.190	+20.008	64 1310	8.6	9	-61.779	-15.646			13	-38.741	-53.778	65 1294	9.8	9	-15.497	-35.152		
	241					301					361					421			
9	+31.234	+13.175			10	-61.757	-49.816	65 1278	9.6	35	-38.603	-41.149	65 1295	8.4	10	-15.249	-45.324		
9	+31.282	+10.287			9	-61.592	-11.471			15	-38.492	-10.032	65 1297	9.9	15	-15.063	-3.871	64 1254	9.6
9	+32.341	+22.061			10	-61.388	-7.189			11	-37.430	-16.359			14	-15.013	-2.562	64 1255	9.9
10	+34.171	+34.869	64 1311	9.6	9	-61.304	-7.478			12	-37.423	-63.499	65 1296	9.6	34	-14.730	-36.936	65 1313	8.4
9	+34.845	+60.382			9	-61.202	-19.998			9	-37.249	-24.138			9	-14.466	-7.052		
9	+35.333	+6.979			9	-61.050	-8.267			27	-37.047	-36.159	65 1298	8.6	9	-14.082	-1.668		
9	+35.341	+39.060			10	-61.018	-18.358	65 1279	9.9	14	-36.956	-7.768	64 1242	9.9	9	-14.081	-56.332		
9	+35.477	+10.820			10	-69.485	-31.592			10	-35.982	-3.534			10	-12.764	-62.920	65 1314	9.9
9	+35.999	+0.227	64 1312	9.7	9	-60.253	-3.857			13	-35.920	-26.265	65 1299	9.9	9	-12.590	-24.003		
9	+37.219	+39.360	64 1313	9.7	9	-60.188	-7.065			11	-35.917	-50.646			28	-12.245	-3.318	64 1257	9.0
	251					311					371					431			
9	+38.436	+7.630			19	-58.604	-17.458	65 1280	9.2	9	-32.504	-7.862			34	-11.902	-11.260	65 1315	8.2
9	+39.333	+29.745	64 1314	9.6	21	-56.598	-19.464	65 1281	9.2	12	-35.068	-13.722			13	-11.350	-9.474		
14	+40.006	+39.625	64 1315	9.4	10	-55.676	-3.142			17	-33.941	-36.250	65 1300	9.6	9	-11.148	-47.466		
9	+40.948	+32.202			15	-54.752	-27.695	65 1282	9.6	9	-33.856	-35.832			17	-10.945	-0.302	64 1258	9.6
9	+41.872	+3.378			9	-54.740	-19.122			9	-33.366	-24.347			9	-10.842	-18.360		
9	+42.506	+23.252			9	-53.039	-53.049			9	-33.007	-11.176			10	-10.623	-8.234	65 1316	9.7
15	+43.376	+56.263	63 1456	9.3	19	-52.807	-9.077	65 1284	9.4	10	-31.906	-3.438			9	-10.210	-47.028		
9	+44.266	+31.320			9	-52.704	-27.565			9	-30.546	-6.045			9	-9.889	-51.648		
10	+44.398	+37.227	64 1316	9.5	9	-52.629	-12.225			13	-30.057	-56.629	65 1301	9.7	9	-9.418	-56.830		
9	+44.530	+36.815	64 1317	9.9	11	-52.588	-8.466	65 1285	9.9	9	-29.964	-29.055			9	-9.055	-51.192	65 1317	9.3
	261					321					381					441			
18	+45.155	+14.035	64 1318	9.1	26	-52.184	-32.727	65 1283	8.9	10	-29.746	-13.693			9	-8.942	-18.895		
9	+46.576	+18.294	64 1319	9.8	11	-51.682	-3.099			9	-29.734	-39.044			9	-8.813	-43.325		
20	+46.581	+11.023	64 1320	9.1	18	-50.484	-2.440	64 1229	9.5	9	-29.310	-1.044			9	-8.721	-50.765		
9	+46.708	+9.416	64 1321	9.8	10	-50.307	-0.361			10	-29.135	-37.010			9	-7.932	-23.436		
9	+47.669	+2.908			11	-49.785	-21.784			20	-29.085	-23.780	65 1302	9.3	13	-7.248	-9.032	65 1318	9.7
9	+48.183	+15.101	64 1322	9.8	13	-49.455	-2.636	64 1231	9.9	9	-28.530	-44.125			9	-7.160	-46.686		
9	+48.457	+60.749	63 1462	9.0	11	-49.083	-0.246			16	-27.950	-24.780	65 1303	9.9	9	-7.135	-26.761		
9	+48.745	+18.143			9	-49.024	-17.516			9	-27.810	-55.777			9	-6.830	-37.008		
12	+49.336	+30.196	64 1323	9.3	9	-47.944	-34.583			9	-27.766	-17.564			9	-6.208	-29.430		
9	+50.453	+29.773	64 1324	9.8	32	-47.801	-3.077	64 1234	8.7	9	-27.700	-8.669			17	-6.202	-59.334	65 1319	9.6
	271					331					391					451			
9	+51.092	+5.372	64 1325	9.8	17	-47.305	-27.811	65 1286	9.4	18	-27.265	-26.027	65 1304	9.5	10	-5.724	-40.610	65 1320	9.8
9	+51.375	+5.744	64 1326	9.9	9	-46.714	-61.100			9	-26.682	-41.332			10	-5.554	-29.739	65 1321	9.7
9	+51.421	+17.138			11	-46.237	-25.220			12	-25.960	-3.258			9	-5.250	-45.586		
9	+53.343	+11.146			10	-46.015	-47.390	65 1287	9.9	9	-25.052	-38.620			9	-5.134	-48.146		
9	+53.711	+50.903	64 1327	9.7	9	-45.545	-25.427			9	-24.556	-11.587			9	-4.812	-9.440		
9	+54.008	+3.617	64 1333	9.8	28	-45.003	-35.870	65 1288	8.8	9	-24.406	-38.305			9	-4.702	-41.944		
10	+54.267	+9.962	64 1332	9.6	9	-44.556	-17.548			9	-23.299	-50.077			12	-4.603	-10.685	65 1322	9.7
9	+54.487	+43.519	64 1328	9.9	9	-44.416	-11.037			38	-23.189	-34.135	65 1305	7.8	9	-4.422	-32.567		
10	+55.173	+35.478	64 1331	9.6	9	-44.393	-48.470			9	-22.585	-4.205			15	-3.960	-53.919	65 1323	9.5
11	+55.427	+45.702	64 1329	9.4	9	-44.311	-1.801			9	-22.458	-4.177			9	-3.403	-64.879	65 1324	9.8
	281					341					401					461			
9	+55.521	+25.308	64 1334	9.7	9	-44.266	-24.035			9	-22.320	-22.389			11	-3.168	-21.678	65 1325	9.8
12	+55.528	+47.273	64 1330	9.3	10	-44.132	-60.384	65 1289	9.9	9	-21.217	-23.421			9	-3.162	-14.184		
10	+55.814	+7.606	64 1335	9.4	10	-43.981	-6.997			10	-21.121	-5.157			9	-2.008	-46.854		
10	+56.439	+8.165	64 1337	9.5	14	-43.964	-13.265	65 1290	9.9	10	-20.821	-25.414			9	-1.943	-62.090		
15	+57.814	+46.892	64 1336	9.2	10	-43.796	-14.508			9	-20.743	-8.863			9	-1.554	-37.780		
34	+59.095	+7.816	64 1339	8.2	10	-43.631	-3.472			17	-20.580	-10.559	65 1306	9.7	9	-1.164	-56.006		
9	+59.137	+12.884			9	-43.482	-3.408			15	-19.745	-10.595	65 1307	9.8	9	-0.806	-62.200		
24	+60.351	+27.671	64 1340	8.7	9	-43.304	-29.321			10	-19.021	-7.337			15	-0.588	-16.336	65 1326	9.4
19	+62.966	+5.835	64 1342	8.8	10	-43.092	-11.006			10	-18.956	-13.275			9	-0.553	-1.256		
9	+63.324	+13.338	64 1343	9.9	9	-43.058	-15.400			9	-18.629	-5.721			9	-0.237	-56.204		

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	471,					531,					591,				PLATE CENTRE. 10^h 39^m, - 65°. Plate 3259 1910, March. II PROVISIONAL CONSTANTS. $a = -0.01162$ $d = +0.00036$ $b = -0.00017$ $e = -0.01139$ $c = +0.0187$ $f = +0.0311$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$								
9	+0.002	-53.242			10	+23.462	-2.582			9	+53.181	-13.175	65 1398	9.9	9	-64.843	+53.240						
10	+0.151	-37.054	65 1327	9.9	9	+23.977	-47.314	65 1358	9.9	10	+53.449	-32.851	65 1403	9.7	11	-64.812	+4.910	64 1325	9.8				
11	+0.781	-2.334	64 1272	9.7	9	+24.383	-59.793	65 1359	9.9	9	+54.652	-47.590	65 1405	9.8	10	-64.584	+5.297	64 1326	9.9				
9	+1.411	-38.202			9	+25.629	-18.841			9	+55.159	-7.729			10	-64.205	+43.186	64 1328	9.9				
10	+1.486	-23.345	65 1328	9.9	9	+26.034	-0.662			9	+56.637	-19.613	65 1406	9.9	13	-63.443	+4.015	64 1330	9.3				
9	+1.758	-39.188			24	+26.624	-11.316	65 1360	8.9	12	+56.994	-2.935	64 1338	9.6	13	-63.439	+45.450	64 1329	9.4				
9	+1.905	-30.847			9	+27.044	-44.315			9	+57.243	-23.267	65 1407	9.9	11	-62.982	+10.828						
11	+2.581	-16.039	65 1329	9.7	9	+28.397	-47.559			9	+57.507	-64.696	65 1409	9.5	12	-62.945	+35.231	64 1331	9.6				
9	+4.243	-2.862			11	+29.706	-13.875	65 1361	9.6	12	+57.977	-48.055	65 1408	9.5	9	-62.264	+7.680						
9	+4.748	-37.354			9	+30.294	-10.625	65 1362	9.9	12	+62.536	-28.470	65 1410	9.5	15	-61.970	+9.721	64 1332	9.6				
	481					541					601				12	-61.856	+25.107	64 1334	9.7				
9	+4.812	-33.875			18	+31.023	-36.194	65 1364	9.2	9	+62.823	-5.442	64 1344	9.9	11	-61.773	+3.380	64 1333	9.8				
9	+5.218	-31.141			10	+31.073	-13.740	65 1363	9.8	9	+63.332	-6.783	64 1347	9.9	15	-61.125	+46.819	64 1336	9.2				
9	+5.532	-24.791			9	+31.623	-12.425			9	+64.163	-59.758	65 1415	9.6	9	-60.594	+23.891						
12	+5.598	-27.592	65 1331	9.5	9	+31.929	-16.815			10	+64.199	-4.890	64 1348	9.7	18	-60.258	+7.485	64 1335	9.4				
10	+5.921	-14.164	65 1332	9.8	9	+32.132	-44.356			9 -64.843 +53.240 11 -64.812 +4.910 64 1325 9.8 10 -64.584 +5.297 64 1326 9.9 10 -64.205 +43.186 64 1328 9.9 13 -63.443 +4.015 64 1330 9.3 13 -63.439 +45.450 64 1329 9.4 11 -62.982 +10.828 12 -62.945 +35.231 64 1331 9.6 9 -62.264 +7.680 15 -61.970 +9.721 64 1332 9.6 12 -61.856 +25.107 64 1334 9.7 11 -61.773 +3.380 64 1333 9.8 15 -61.125 +46.819 64 1336 9.2 9 -60.594 +23.891 18 -60.258 +7.485 64 1335 9.4 12 -59.976 +62.966 63 1488 9.8 16 -59.705 +8.091 64 1337 9.5 10 -58.456 +23.247 9 -57.663 +63.244 11 -57.357 +12.987 21 11 -57.344 +43.590 22 -57.198 +27.808 64 1340 8.7 11 -57.049 +21.613 30 -57.017 +7.947 64 1339 8.2 10 -56.996 +35.904 9 -56.381 +50.161 11 -56.374 +8.855 10 -55.625 +6.991 9 -55.212 +19.237 10 -54.796 +45.428 64 1341 9.9 31 12 -53.860 +54.955 9 -53.704 +21.161 12 -53.218 +13.788 64 1343 9.9 9 -53.161 +33.145 20 -53.021 +6.251 64 1342 8.8 12 -52.992 +32.160 64 1346 9.8 18 -52.666 +16.801 64 1345 9.2 9 -52.554 +44.888 11 -52.401 +27.024 12 -51.146 +18.097 41 10 -51.082 +22.833 22 -50.725 +10.515 64 1350 8.6 9 -50.698 +19.107 12 -50.676 +4.475 64 1349 9.9 9 -49.499 +14.684 12 -49.414 +27.995 64 1352 9.9 10 -49.318 +8.510 10 -49.214 +18.330 19 -49.211 +36.733 64 1353 9.0 12 -49.189 +15.447 64 1351 9.9													
9	+6.484	-12.490	65 1333	9.8	9	+32.574	-26.554																
9	+6.502	-26.117			32	+33.123	-22.454	65 1365	8.8														
10	+6.763	-64.531	65 1334	9.6	9	+33.347	-37.853																
9	+6.922	-51.038			33	+33.426	-57.934	65 1368	8.5														
9	+7.595	-52.294			11	+33.479	-47.152	65 1367	9.6														
	491					551																	
9	+8.125	-48.259			21	+33.857	-22.713	65 1366	9.1														
9	+8.631	-03.817	65 1335	9.8	9	+33.857	-45.988	65 1369	9.8														
10	+9.012	-43.670	65 1336	9.8	9	+34.119	-45.044	65 1370	9.9														
15	+9.587	-7.995	65 1337	9.5	9	+34.299	-3.780																
9	+9.614	-53.650			11	+36.299	-49.566	65 1372	9.6														
9	+10.266	-62.916	65 1339	9.8	12	+36.957	-61.995	65 1373	9.4														
13	+10.437	-35.535	65 1338	9.6	9	+37.537	-34.306																
10	+10.841	-61.770	65 1340	9.5	9	+37.812	-2.174																
13	+11.803	-50.094	65 1342	9.6	10	+38.509	-32.454	65 1374	9.7														
9	+12.116	-32.115			12	+38.821	-45.460	65 1376	9.5														
	501					561																	
9	+12.818	-33.404			9	+39.457	-41.903	65 1378	9.8														
9	+12.818	-35.606			15	+39.741	-10.896	65 1375	9.4														
9	+13.907	-15.532	65 1343	9.9	10	+39.743	-22.553	65 1377	9.7														
9	+14.092	-51.724			9	+39.937	-50.801	65 1381	9.8														
9	+14.490	-30.339			9	+40.418	-14.821	65 1379	9.9														
9	+14.538	-47.012			25	+40.651	-53.617	65 1383	9.0														
19	+14.729	-61.401	65 1345	9.2	9	+40.765	-52.103	65 1384	9.8														
17	+14.874	-39.983	65 1344	9.2	10	+40.818	-18.951	65 1380	9.8														
10	+15.530	-55.611	65 1347	9.8	9	+41.984	-62.469	65 1387	9.8														
28	+15.664	-16.319	65 1346	8.8	9	+43.084	-44.438																
	511					571																	
12	+16.913	-48.696	65 1349	9.6	10	+43.157	-30.843	65 1386	9.6														
18	+16.983	-31.871	65 1348	9.2	9	+43.297	-9.240																
9	+17.196	-9.830			9	+44.257	-40.956	65 1389	9.8														
19	+17.808	-39.979	65 1350	9.1	11	+44.717	-21.367	65 1388	9.6														
11	+18.109	-3.344	64 1297	9.8	9	+45.456	-15.416																
9	+18.309	-20.287			10	+45.735	-46.634	65 1390	9.6														
17	+18.923	-10.939	65 1351	9.4	11	+45.848	-60.931	65 1391	9.6														
20	+19.131	-11.628	65 1352	9.1	32	+46.058	-57.655	65 1392	8.6														
10	+20.107	-19.741	65 1353	9.7	39	+48.749	-64.864	65 1393	8.5														
15	+20.549	-53.934	65 1355	9.4	9	+48.804	-25.865																
	521					581																	
55	+20.817	-11.958	65 1354	6.6	13	+49.811	-61.132	65 1395	9.1														
9	+20.985	-49.038			22	+50.947	-16.828	65 1394	9.1														
9	+21.399	-19.005			9	+51.519	-42.090	65 1397	9.6														
10	+21.631	-50.842	65 1356	9.8	9	+51.670	-7.399																
9	+21.921	-24.057			9	+51.689	-19.583	65 1396	9.7														
9	+22.066	-21.239			10	+51.964	-49.923	65 1400	9.6														
9	+22.199	-17.914			12	+52.393	-39.923	65 1401	9.5														
9	+22.483	-37.476			18	+52.585	-41.451	65 1402	9.2														
12	+23.237	-31.608	65 1357	9.6	10	+53.006	-18.512	65 1399	9.6														
11	+23.385	-5.908	64 1302	9.8	10	+53.117	-56.085	65 1404	9.5														

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
10	-48°638	+54°170			10	-34°732	+15°479			11	-20°496	+34°756			13	-11°067	+59°159	63 1570	9.6
24	48°539	+18°431	64 1354	8.6	9	-34°683	+1°122			12	-20°465	+33°126	64 1388	9.9	11	-10°902	+49°019		
9	-48°541	+16°671			19	-34°481	+0°664	64 1356	9.2	10	-20°454	+26°056			10	-10°627	+26°424		
11	-48°230	+8°069			10	-34°422	+11°548			10	-20°142	+0°930			10	-10°545	+63°110		
13	-47°837	+12°381	64 1355	9.8	11	-34°300	+10°404			11	-19°981	+0°999	64 1389	9.8	12	-10°257	+45°812		
9	-47°782	+33°295			10	-33°947	+44°691			9	-19°800	+62°507			12	-9°593	+47°840		
12	-47°704	+57°493	63 1508	9.8	12	-33°907	+2°537			16	-19°627	+36°593	64 1390	9.3	9	-9°546	+58°695		
10	-47°679	+61°631			10	-33°816	+63°102			13	-19°605	+32°165	64 1391	9.7	60	-9°490	+63°564	63 1573	7.0
9	-47°393	+24°131			11	-33°497	+55°549			11	-19°549	+8°016			9	-9°196	+17°224		
10	-47°028	+33°694			10	-32°884	+39°013			11	-19°535	+8°420			14	-9°191	+0°803	64 1410	9.6
	61					121					181					241			
9	-46°610	+7°115			12	-32°837	+20°252	64 1368	9.9	12	-19°420	+33°599	64 1392	9.9	9	-9°047	+26°975		
11	-46°269	+20°785			11	-32°279	+39°533	64 1369	9.9	11	-19°419	+34°825			11	-8°981	+13°237		
10	-46°114	+20°747	64 1356	9.8	11	-32°186	+4°264			19	-19°395	+50°364	64 1395	8.9	9	-8°801	+57°501		
10	-45°958	+22°970			9	-32°147	+3°190			9	-19°295	+64°193			11	-8°781	+29°214		
9	-45°080	+2°298			10	-31°836	+17°003			19	-19°188	+26°434			12	-8°757	+22°770	64 1411	9.8
11	-44°913	+24°241			12	-31°617	+53°337	63 1521	9.9	12	-19°171	+51°867	64 1396	9.8	16	-8°493	+3°134	64 1412	9.4
16	-44°802	+52°522	63 1512	9.2	10	-31°472	+26°571			16	-19°139	+16°320	64 1393	9.4	13	-8°391	+22°555	64 1413	9.6
10	-44°762	+50°285			18	-31°211	+8°515			18	-19°089	+26°412	64 1394	8.9	11	-8°257	+25°087		
9	-44°679	+42°244			18	-31°199	+8°598	64 1370	9.0	16	-18°538	+6°286	64 1397	9.4	10	-8°251	+42°432		
12	-44°555	+28°480	64 1358	9.9	9	-30°642	+17°885			18	-17°927	+37°475	64 1399	9.2	12	-7°886	+32°133	64 1414	9.8
	71					131					191					251			
11	-44°543	+8°489			9	-30°367	+27°480			11	-17°894	+10°332	64 1398	9.8	9	-7°660	+25°301		
12	-44°412	+21°776	64 1357	9.8	9	-30°343	+4°832			10	-17°871	+8°204			9	-7°619	+35°809		
9	-44°386	+60°416			10	-30°276	+44°689			9	-17°847	+2°959			9	-7°509	+20°953		
9	-43°623	+58°306			11	-30°219	+8°201			9	-17°710	+39°601			13	-7°498	+10°944	64 1415	9.6
9	-43°446	+17°379			10	-30°025	+17°823			10	-17°545	+39°586			9	-7°413	+51°745		
10	-42°384	+20°101			18	-29°768	+26°196	64 1371	9.2	9	-17°521	+26°610			13	-7°251	+25°503	64 1416	9.6
9	-41°895	+25°324			16	-28°296	+27°364	64 1372	9.4	12	-17°502	+49°036			12	-7°109	+58°587	63 1579	9.6
11	-41°063	+12°478			9	-27°802	+59°717			10	-17°393	+49°062	64 1400	9.6	12	-7°056	+35°167	64 1417	9.8
10	-40°900	+0°124			12	-27°630	+20°625	64 1373	9.7	12	-17°015	+10°819	64 1401	9.8	10	-7°018	+31°815		
11	-40°804	+22°917			50	-27°052	+28°772	64 1374	7.2	9	-16°552	+41°110			9	-6°925	+42°314		
	81					141					201					261			
10	-40°678	+28°131			9	-27°009	+9°018			10	-16°895	+56°620			9	-6°917	+61°078		
10	-40°574	+40°246			9	-26°851	+6°147			9	-16°449	+23°193			20	-6°913	+57°169	63 1581	9.0
11	-40°493	+12°569			10	-25°684	+43°344			13	-16°293	+35°139	64 1402	9.6	10	-6°568	+25°489		
9	-40°097	+12°200			10	-25°661	+10°938			12	-15°792	+60°536	63 1557	9.9	9	-6°459	+22°520		
10	-39°905	+19°072			12	-25°574	+39°023	64 1376	9.9	9	-15°535	+31°063			10	-6°243	+60°282		
11	-39°420	+5°377			15	-24°768	+18°763	64 1378	9.5	56	-14°847	+25°456	64 1403	5.7	9	-6°197	+0°379		
10	-39°122	+45°586			11	-24°634	+31°410			10	-14°660	+26°424			15	-6°111	+25°322	64 1418	9.5
12	-38°389	+4°210			9	-24°548	+2°960			15	-14°564	+7°094	64 1404	9.6	12	-6°090	+36°311		
10	-38°318	+18°423			15	-24°462	+13°567	64 1379	9.5	19	-14°064	+61°031	63 1560	9.2	9	-6°086	+24°683		
15	-38°195	+20°755	64 1359	9.6	12	-24°424	+26°958	64 1380	9.8	12	-13°961	+27°328	64 1405	9.8	10	-5°927	+26°317		
	91					151					211					271			
14	-38°187	+33°935	64 1360	9.9	13	-24°181	+44°045	64 1381	9.8	9	-13°885	+58°375	63 1562	9.8	9	-5°868	+33°831		
12	-37°974	+36°552	64 1361	9.9	48	-24°172	+61°870	63 1534	7.3	20	-13°830	+63°840	63 1561	9.2	10	-5°789	+26°197		
9	-37°942	+61°254			9	-23°356	+5°256			18	-13°525	+59°401	63 1563	9.4	9	-5°282	+28°697		
11	-37°668	+17°338			11	-22°872	+11°005	64 1382	9.8	10	-13°455	+51°971			10	-5°175	+42°408		
15	-37°367	+13°142	64 1362	9.6	10	-22°754	+36°495			18	-13°145	+55°797	63 1565	9.4	11	-5°164	+60°118		
9	-37°088	+16°215			9	-22°570	+8°236			9	-12°968	+28°876			11	-4°912	+34°367		
10	-36°725	+27°319			10	-22°522	+38°186			9	-12°056	+38°542			10	-4°811	+38°519		
18	-36°559	+26°023	64 1363	9.2	36	-22°336	+32°944	64 1383	8.0	12	-12°783	+20°134	64 1406	9.7	10	-4°714	+25°200		
11	-36°374	+37°486			10	-22°177	+18°566			9	-12°784	+61°737			13	-4°689	+26°977	64 1419	9.6
9	-36°260	+61°536			13	-22°059	+11°405	64 1384	9.6	14	-12°567	+39°461	64 1407	9.6	15	-4°593	+19°851	64 1420	9.4
	101					161					221					281			
13	-36°190	+16°059	64 1364	9.6	16	-22°010	+45°944	64 1385	9.5	10	-12°370	+31°924			10	-4°366	+24°877		
10	-36°186	+5°974			10	-21°604	+11°301			10	-12°294	+13°075			10	-4°323	+22°092		
9	-36°007	+5°889			10	-21°568	+7°776			48	-11°974	+52°664	64 1408	7.3	11	-4°242	+21°701	64 1421	9.8
9	-35°725	+34°074			12	-21°171	+16°237	64 1386	9.9	10	-11°805	+46°290			10	-4°227	+28°781		
11	-35°710	+13°582			10	-21°114	+33°020			11	-11°615	+46°372			9	-4°200	+21°771		
9	-35°489	+7°949			10	-20°942	+33°432			9	-11°547	+30°278			15	-4°166	+33°206	64 1422	9.4
11	-35°279	+1°024			11	-20°799	+40°404			13	-11°443	+57°607	63 1569	9.6	10	-4°147	+27°785		
20	-35°270	+18°397	64 1365	9.1	16	-20°682	+59°347	63 1546	9.4	9	-11°437	+22°714			11	-3°911	+31°527		
10	-35°269	+54°261			9	-20°667	+17°348			10	-11°193	+44°730			15	-3°870	+21°333	64 1423	9.5
11	-34°807	+64°310			11	-20°547	+11°685	64 1387	9.8	12	-11°144	+35°755	64 1409	9.6	9	-3°597	+45°185		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
I3	- 3'550	+24'767	64 1424	9'8	10	+ 3'842	+50'117	64 1448	9'9	12	+14'066	+33'268	64 1462	9'7	10	+28'968	+26'165		
II	- 3'410	+64'846			II	+ 3'905	+51'300			I3	+14'115	+59'017	63 1631	9'6	II	+29'254	+25'905		
9	- 3'455	+23'191			9	+ 3'912	+61'149			9	+14'243	+55'106			II	+29'400	+ 5'441		
I2	- 3'171	+26'465	64 1425	9'6	I3	+ 3'930	+23'977	64 1449	9'8	9	+14'357	+31'858			9	+29'647	+48'870		
II	- 3'161	+38'547			9	+ 4'535	+11'042			9	+14'607	+39'834			9	+29'770	+26'741		
9	- 2'990	+19'791			I4	+ 4'636	+63'462	63 1610	9'6	9	+15'809	+38'694			9	+30'097	+33'146		
II	- 2'813	+23'084			I2	+ 4'910	+52'984	63 1611	9'6	I5	+15'874	+29'445	64 1464	9'6	9	+30'139	+46'474		
II	- 2'792	+10'501	64 1427	9'7	10	+ 5'127	+62'466			I2	+15'918	+46'824	64 1463	9'9	II	+30'475	+11'907		
I2	- 2'776	+24'450	64 1426	9'7	9	+ 5'360	+29'415			I4	+16'230	+59'138	63 1635	9'5	10	+30'617	+ 9'589		
I2	- 2'698	+45'754	64 1428	9'9	9	+ 5'770	+26'021			9	+16'906	+16'880			10	+31'236	+ 4'934		
	301					361					421					481			
I2	- 2'687	+ 8'405	64 1429	9'9	I8	+ 6'244	+ 6'453	64 1450	9'2	20	+16'992	+39'394	64 1465	9'0	9	+31'234	+43'148		
9	- 2'643	+30'305			I2	+ 6'442	+25'335	64 1451	9'8	II	+17'903	+33'562			9	+31'398	+61'821		
9	- 2'607	+30'939			10	+ 6'535	+28'215			9	+18'236	+17'190			I3	+31'722	+ 9'942	64 1482	9'8
I2	- 2'201	+28'405	64 1430	9'8	II	+ 6'545	+44'398			II	+18'448	+53'369			10	+32'045	+47'246		
II	- 2'240	+27'087			9	+ 6'582	+13'921			II	+18'484	+20'461			9	+32'287	+38'544		
64	- 2'111	+64'115	63 1589	5'0	9	+ 6'686	+27'358			10	+18'677	+12'287			9	+32'478	+63'211		
I2	- 2'035	+27'233	64 1431	9'8	9	+ 6'762	+57'665			9	+18'716	+25'132			9	+32'768	+57'318		
9	- 1'979	+60'072			I6	+ 6'806	+64'545	63 1616	9'4	9	+18'724	+48'282			I2	+32'871	+29'637		
I3	- 1'923	+28'150	64 1432	9'8	9	+ 6'902	+ 6'783			II	+18'966	+36'702	64 1467	9'9	56	+33'356	+59'140	63 1670	7'0
10	- 1'913	+22'945			II	+ 6'978	+60'681			9	+19'144	+47'978			I2	+34'047	+ 3'834		
	311					371					431					491			
9	- 1'854	+41'090			9	+ 7'026	+58'273			II	+19'302	+36'702	64 1468	9'9	II	+34'086	+32'883		
II	- 1'623	+24'843	64 1433	9'9	10	+ 7'185	+44'791			I3	+19'387	+59'790			II	+34'132	+57'745	63 1671	9'9
II	- 1'522	+23'213			10	+ 7'314	+ 2'787			II	+19'609	+28'271			10	+34'332	+41'418		
10	- 1'308	+56'321			9	+ 7'314	+38'719			32	+19'629	+49'748	64 1469	8'1	9	+34'485	+ 0'272		
9	- 1'240	+22'013			20	+ 7'368	+ 2'701	64 1452	8'8	16	+20'435	+45'453	64 1470	9'4	15	+34'574	+ 7'621	64 1483	9'6
9	- 1'237	+ 5'527			10	+ 7'431	+61'185			I2	+20'617	+50'326	64 1471	9'8	9	+34'705	+45'936		
I2	- 0'741	+28'182	64 1434	9'8	9	+ 7'459	+17'256			II	+20'835	+47'269			22	+35'605	+60'143	63 1673	9'2
II	- 0'714	+54'839			10	+ 7'604	+30'533			9	+20'936	+38'835			II	+36'063	+ 1'188		
9	- 0'688	+22'519			9	+ 7'616	+ 8'537			I8	+21'000	+31'093	64 1472	9'2	I2	+36'112	+17'812	64 1484	9'6
10	- 0'665	+ 3'517			9	+ 8'012	+59'696			9	+21'028	+25'089			II	+36'301	+31'875		
	321					381					441					501			
I4	- 0'599	+27'883	64 1435	9'7	10	+ 8'279	+15'381			I5	+21'542	+11'711	64 1473	9'6	II	+36'374	+ 4'267		
I3	- 0'460	+26'452	64 1436	9'8	II	+ 8'364	+ 3'116			9	+21'679	+47'215			II	+36'381	+26'125		
II	- 0'421	+52'369			9	+ 8'805	+20'303			9	+22'121	+62'440			II	+36'601	+39'388		
II	+ 0'010	+26'771			I2	+ 8'950	+34'194	64 1453	9'8	II	+22'699	+51'979			9	+36'639	+ 5'350		
10	+ 0'035	+12'567			9	+ 9'032	+58'065			10	+23'289	+26'139			18	+36'712	+ 3'451	64 1487	9'4
II	+ 0'054	+24'082			I4	+ 9'133	+44'281	64 1454	9'6	II	+23'404	+14'224			9	+37'036	+41'495		
II	+ 0'107	+27'583			10	+ 9'143	+27'357			32	+23'551	+56'301	63 1642	8'0	II	+37'104	+57'569		
9	+ 0'190	+25'820			II	+ 9'471	+53'365			9	+23'564	+19'278			II	+37'168	+44'226	64 1485	9'9
I8	+ 0'343	+49'662	64 1437	9'2	II	+ 9'561	+ 9'779	64 1455	9'8	9	+23'731	+62'435			II	+37'797	+48'058	64 1486	9'9
15	+ 0'481	+31'259	64 1438	9'7	9	+ 9'799	+37'606			I6	+22'085	+64'299	63 1644	9'3	I2	+37'813	+ 5'325	64 1488	9'9
	331					391					451					511			
10	+ 0'769	+22'915			10	+10'159	+37'242			64	+24'311	+61'203	63 1646	5'9	10	+37'892	+ 0'040		
36	+ 0'625	+51'297	64 1439	7'9	I4	+10'203	+10'186	64 1457	9'6	10	+24'314	+36'427			9	+38'001	+34'640		
I3	+ 0'760	+25'413			9	+10'213	+54'636			II	+24'403	+44'239			II	+38'051	+52'430	63 1681	9'8
II	+ 0'870	+25'321	64 1440	9'6	II	+10'220	+12'341			9	+24'538	+18'428			10	+38'311	+59'510		
10	+ 0'890	+25'607			I8	+10'381	+51'420	64 1456	8'8	I2	+24'988	+12'720	64 1477	9'6	9	+38'340	+40'426		
10	+ 1'781	+51'557			II	+10'925	+20'975			I2	+25'105	+59'690	63 1648	9'8	II	+38'628	+58'502		
10	+ 1'838	+19'044	64 1442	9'9	I3	+10'979	+45'495	64 1458	9'7	9	+25'487	+46'386			10	+38'678	+ 0'875		
I3	+ 1'856	+27'424	64 1441	9'6	II	+11'025	+40'746			I4	+25'623	+ 4'116	64 1478	9'6	I2	+39'159	+ 8'271		
9	+ 1'889	+60'129			9	+11'318	+52'269			I2	+26'346	+ 2'984	64 1479	9'6	16	+39'904	+62'047	63 1683	9'5
20	+ 1'919	+19'911	64 1443	8'9	I2	+11'483	+28'381			I2	+26'474	+27'599			I2	+40'060	+38'027	64 1489	9'8
	341					401					461					521			
I2	+ 2'412	+62'220	63 1600	9'6	10	+11'571	+48'370			I2	+26'814	+62'729	63 1653	9'8	II	+40'679	+51'082		
II	+ 2'474	+25'366	64 1444	9'9	15	+11'631	+47'541	64 1459	9'5	28	+26'960	+55'026	63 1654	8'6	I2	+40'744	+ 0'889	64 1492	9'7
10	+ 2'541	+39'423			9	+12'339	+44'171			I2	+27'601	+38'156	64 1480	9'8	9	+40'941	+ 3'359		
9	+ 2'587	+63'229			9	+12'380	+14'135			9	+27'805	+21'706			10	+41'351	+64'341		
I2	+ 2'778	+21'029	64 1445	9'9	I3	+12'614	+25'436	64 1460	9'6	II	+27'883	+ 1'856			II	+41'462	+45'998	64 1490	9'9
10	+ 3'032	+25'871			9	+12'765	+14'803			I2	+28'075	+27'562			9	+41'603	+45'716		
II	+ 3'196	+38'843			9	+12'932	+32'157			I3	+28'127	+37'479	64 1481	9'5	9	+42'742	+13'116		
I2	+ 3'285	+ 1'119	64 1447	9'8	I3	+13'229	+24'569	64 1461	9'8	20	+28'140	+61'103	63 1656	9'1	10	+42'997	+ 0'605		
10	+ 3'389	+20'418			9	+13'351	+55'867			II	+28'286	+62'647			10	+42'994	+54'124		
9	+ 3'545	+15'591			9	+13'634	+36'372			9	+28'424	+ 0'696			I3	+43'179	+53'773	63 1689	9'3

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531,					591,					651,					711,			
9	+43°287	+62°089			9	+62°168	+6°436			11	-50°085	-42°315			9	-36°933	-13°968		
9	+43°401	+36°084			9	+62°192	+2°068			12	-48°843	-42°182	65 1412	9°8	12	-36°769	-20°511		
12	+43°705	+37°303	64 1494	9°7	9	+62°580	+64°502	63 1721	9°9	9	-48°791	-18°006			9	-36°708	-34°119		
9	+43°824	+47°982			9	+62°585	+42°210			10	-48°780	-6°051			9	-36°192	-0°554		
11	+43°898	+56°668			11	+62°782	+32°523	64 1511	9°6	10	-48°661	-53°252			16	-36°102	-33°522	65 1431	9°7
10	+45°206	+10°883			9	+63°067	+62°848			9	-48°628	-18°334			10	-35°759	-42°943		
13	+45°248	+23°335	64 1495	9°9	9	+63°293	+10°611			10	-48°586	-25°578	65 1413	9°9	9	-35°646	-32°433		
11	+45°320	+20°093			12	+63°394	+37°330	64 1514	9°9	9	-48°423	-48°599			14	-35°334	-48°575	65 1432	9°6
19	+45°949	+44°472	64 1496	9°2	11	+63°518	+7°840			11	-48°352	-60°629	65 1411	9°8	10	-35°291	-41°833		
9	+46°927	+43°554			9	+63°706	+19°136			10	-48°259	-6°481			11	-34°623	-1°186		
	541					601					661					721			
11	+47°041	+45°109	64 1499	9°8	12	+63°960	+24°470	64 1516	9°7	19	-48°187	-14°453	65 1416	9°4	9	-34°537	-54°760		
11	+47°780	+7°593			9	+64°572	+0°815			13	-48°042	-25°392	65 1414	9°8	9	-34°377	-39°716		
9	+47°945	+4°035			16	+64°915	+7°776	64 1519	9°2	10	-47°885	-35°110			9	-34°070	-37°951		
12	+47°949	+51°745	63 1698	9°8	10	-64°838	-26°411			9	-47°502	-36°439			14	-33°845	-6°000	64 1367	9°7
9	+48°114	+3°020			9	-63°905	-1°294			20	-47°426	-19°026	65 1417	9°0	11	-32°736	-62°975		
9	+48°281	+16°937			20	-63°344	-17°236	65 1394	9°1	10	-47°243	-14°972			10	-32°514	-39°773		
10	+48°424	+31°019			10	-63°312	-7°765			10	-47°224	-29°423			11	-32°494	-10°086		
11	+48°534	+26°272			9	-63°184	-25°724			9	-47°214	-29°600			11	-32°307	-27°535		
9	+48°606	+9°679			9	-62°853	-34°321			13	-47°080	-59°045	65 1415	9°6	10	-32°274	-50°528		
40	+48°621	+59°243	63 1699	8°0	9	-62°418	-23°376			10	-47°071	-48°796			11	-32°226	-47°247		
	551					611					671					731			
9	+48°818	+9°052			11	-62°394	-19°915	65 1396	9°7	15	-46°712	-35°250	65 1418	9°6	12	-31°294	-37°950		
9	+48°962	+9°463			9	-61°877	-0°450			9	-46°589	-34°303			9	-29°872	-28°068		
11	+49°162	+12°957			12	-61°379	-13°424	65 1398	9°9	9	-45°605	-9°191			9	-29°734	-30°721		
11	+49°473	+22°703			18	-61°265	-61°493	65 1395	9°1	16	-45°597	-34°154	65 1420	9°5	11	-29°686	-21°765		
12	+50°334	+1°345			12	-61°171	-18°762	63 1399	9°6	16	-45°526	-38°444	65 1419	9°4	14	-29°591	-53°940	65 1434	9°4
10	+50°856	+0°757			13	-60°950	-42°388	65 1397	9°6	10	-45°373	-20°507			9	-29°558	-60°841		
13	+51°079	+63°883	63 1703	9°7	15	-60°248	-40°176	65 1401	9°5	10	-45°256	-20°467			9	-29°363	-6°976		
16	+51°233	+29°327	64 1500	9°4	20	-59°955	-41°664	65 1402	9°2	13	-44°932	-47°003	65 1421	9°5	10	-29°298	-8°050		
12	+51°768	+24°287	64 1501	9°9	13	-59°946	-50°156	65 1400	9°6	11	-44°630	-56°138			20	-29°234	-44°281	65 1435	9°2
10	+51°827	+64°181	63 1705	9°9	10	-59°822	-7°853			10	-44°503	-60°947			10	-29°006	-47°747		
	561					621					681					741			
9	+52°983	+1°559			12	-59°704	-33°025	65 1403	9°7	9	-44°145	-35°749			12	-28°708	-43°745		
10	+53°017	+18°122			10	-58°998	-5°803			11	-43°866	-11°262			12	-28°706	-33°001		
10	+53°259	+5°106			14	-58°337	-56°220	65 1404	9°5	9	-43°855	-13°132			9	-27°251	-0°399		
9	+53°650	+6°137			15	-58°334	-2°935	64 1338	9°6	11	-43°806	-49°309	65 1422	9°9	9	-26°938	-57°322		
48	+53°688	+62°869	63 1708	8°1	11	-57°593	-19°588	65 1406	9°9	12	-43°535	-1°568			10	-26°872	-23°283		
15	+53°762	+32°584	64 1502	9°6	12	-57°421	-47°626	65 1405	9°8	9	-43°000	-45°949			12	-26°792	-13°927	65 1436	9°9
9	+53°977	+61°755			9	-57°328	-42°784			9	-42°784	-1°819			15	-25°761	-6°367	64 1375	9°5
16	+54°339	+23°162	64 1503	9°4	11	-57°224	-40°099			13	-42°754	-25°414	65 1423	9°8	9	-25°698	-52°986		
9	+55°260	+3°248			9	-56°641	-30°296			11	-42°712	-60°955			10	-25°424	-52°741		
9	+55°612	+17°882	64 1504	9°9	11	-56°606	-23°191	65 1407	9°9	12	-42°420	-19°787	65 1424	9°9	12	-25°355	-9°775	65 1439	9°8
	571					631					691					751			
10	+57°259	+54°482			9	-56°486	-20°111			10	-41°862	-48°052			10	-25°322	-34°239		
11	+57°810	+58°390	63 1711	9°8	9	-56°455	-51°137			9	-41°424	-47°686			10	-25°229	-1°307		
12	+57°921	+4°637	64 1506	9°7	9	-55°938	-2°194			10	-41°334	-33°165			11	-25°193	-43°305		
9	+58°285	+35°636			11	-55°084	-9°627			12	-40°965	-7°553			14	-25°151	-32°905	65 1438	9°9
11	+58°314	+21°968			14	-54°094	-47°848	65 1408	9°5	9	-40°868	-27°256			11	-24°745	-2°331		
9	+58°992	+27°459			9	-53°881	-40°137			9	-40°684	-62°371			9	-24°699	-52°377		
13	+58°610	+9°696	64 1507	9°7	15	-53°346	-64°476	65 1409	9°5	13	-40°553	-36°878	65 1425	9°8	12	-24°646	-5°088	64 1377	9°9
9	+58°843	+16°980			9	-53°113	-35°380			9	-40°378	-30°531			10	-24°445	-0°598		
12	+59°108	+50°298	64 1505	9°6	9	-53°057	-14°232			9	-40°319	-31°706			10	-23°069	-35°241		
9	+59°778	+5°974			11	-52°449	-56°552			9	-40°033	-47°755			11	-23°020	-33°969		
	581					641					701					761			
11	+59°928	+53°703	63 1716	9°6	12	-52°355	-5°020	64 1344	9°9	9	-39°567	-58°218			10	-22°712	-16°205		
9	+60°542	+54°669			12	-51°746	-6°321	64 1347	9°9	19	-39°450	-11°680	65 1427	9°2	9	-22°588	-64°434		
10	+60°619	+28°181			9	-51°033	-14°474			14	-39°350	-24°471	65 1426	9°6	9	-22°188	-26°511		
15	+60°737	+5°138	64 1509	9°5	13	-51°012	-4°363	64 1348	9°7	12	-38°834	-9°524			12	-20°914	-62°748		
10	+60°743	+49°231			16	-50°967	-27°994	65 1410	9°5	12	-38°422	-28°119			12	-20°802	-15°341	65 1441	9°9
9	+61°363	+5°654			11	-50°775	-26°900			9	-38°048	-1°846			12	-20°130	-25°448		
9	+61°556	+20°771			9	-50°752	-63°815			13	-37°982	-17°314	65 1430	9°9	10	-19°899	-13°973		
9	+61°556	+55°921			9	-50°625	-14°646			18	-37°976	-32°641	65 1429	9°5	9	-19°516	-23°040		
13	+61°835	+7°002	64 1513	9°4	9	-50°212	-18°414			9	-37°706	-3°428			13	-19°433	-44°578	65 1442	9°8
12	+62°151	+63°831	63 1720	9°6	11	-50°176	-27°945			10	-37°672	-48°759			11	-19°325	-39°127		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	771,					831,					891,					951,							
9	-19°068	-16°792			9	-4°921	-51°883			9	+12°472	-59°266			11	+23°151	-18°543						
12	-18°512	-29°739			13	-4°912	-36°619	65	1462	9°8	12	+12°955	-21°147			9	+23°336	-36°655					
9	-17°920	-28°195			11	-4°593	-62°729	65	1463	9°9	15	+13°022	-53°335	65	1483	9°6	9	+23°481	-39°601				
9	-17°604	-53°964			10	-4°527	-36°339			9	+13°096	-44°817			10	+23°779	-37°161						
20	-17°419	-58°783	65	1444	9°2	11	-3°637	-0°319			10	+13°136	-53°867			13	+23°956	-3°212	64	1476	9°9		
10	-17°364	-22°628			15	-2°796	-20°655	65	1464	9°5	9	+13°264	-12°874			10	+24°239	-40°472					
9	-16°884	-31°026			9	-2°661	-53°102			10	+13°325	-1°863			10	+24°453	-21°203						
10	-16°710	-21°432			16	-2°379	-32°011	65	1465	9°6	13	+13°352	-49°157	65	1484	9°8	16	+25°244	-10°731	65	1498	9°5	
11	-16°686	-23°290			10	-2°376	-24°427			12	+13°526	-45°909			11	+25°653	-24°245						
9	-16°497	-30°899			11	-1°648	-61°504			10	+14°026	-33°479			12	+25°720	-29°450	65	1499	9°9			
	781					841					901					961							
12	-16°259	-32°992	65	1446	9°8	13	-1°260	-22°101	65	1466	9°6	9	+14°062	-56°079		13	+26°174	-45°835	65	1500	9°8		
9	-16°168	-21°779			9	-0°786	-43°218			16	+14°172	-35°215	65	1485	9°5	15	+27°243	-42°500	65	1501	9°7		
18	-15°965	-31°917	65	1447	9°4	9	-0°595	-28°848			11	+14°412	-31°301			10	+27°294	-1°873					
13	-15°825	-31°592	65	1448	9°8	10	-0°497	-38°484			12	+14°738	-49°561	65	1487	9°8	12	+27°733	-7°578				
9	-15°693	-41°778			10	-0°480	-33°293			9	+15°065	-57°730			9	+28°589	-55°505						
10	-15°665	-4°495			11	-0°059	-34°065			10	+15°102	-9°649	65	1486	9°9	10	+28°638	-28°482					
9	-15°646	-3°517			9	-0°032	-48°766			9	+15°550	-25°458			15	+28°689	-60°592	65	1502	9°5			
10	-15°388	-54°043			9	+0°133	-6°521			11	+16°094	-23°515			9	+29°238	-30°774						
11	-15°295	-51°838			19	+0°920	-52°665	65	1467	9°1	12	+16°462	-55°369			12	+29°312	-52°633	65	1504	9°9		
11	-15°118	-50°494			10	+0°996	-47°562			13	+16°554	-49°668	65	1489	9°9	9	+29°538	-31°991					
	791					851					911					971							
10	-15°074	-15°072			9	+1°184	-59°155			14	+16°646	-4°321	64	1466	9°7	12	+29°610	-15°729	65	1503	9°8		
10	-14°161	-37°531	65	1449	9°2	9	+1°814	-56°206			13	+16°766	-18°887	65	1488	9°8	10	+29°894	-4°507				
12	-13°633	-28°845			10	+2°101	-5°909			9	+18°293	-23°157			32	+30°290	-24°009	65	1505	7°8			
12	-13°467	-52°335	65	1450	9°9	12	+2°138	-64°367	65	1468	9°8	10	+18°344	-60°427		16	+30°350	-32°289	65	1506	9°6		
10	-13°255	-63°927			12	+2°186	-31°959			10	+18°364	-23°487			9	+30°376	-59°315						
10	-12°496	-48°386			13	+3°107	-6°949	64	1446	9°6	9	+18°520	-20°599			11	+30°425	-38°719					
9	-12°497	-17°605			10	+3°460	-31°767			13	+19°180	-49°664	65	1492	9°8	18	+30°447	-23°909					
10	-12°220	-12°757			12	+3°704	-27°230	65	1469	9°9	11	+19°184	-3°369			11	+30°663	-0°615					
13	-12°215	-38°471	65	1451	9°7	17	+4°028	-17°319	65	1470	9°3	11	+19°195	-14°121	65	1490	9°8	10	+30°717	-54°851			
9	-11°893	-53°368			15	+4°710	-16°307	65	1471	9°4	15	+19°238	-26°968	65	1491	9°7	10	+30°854	-35°180				
	801					861					921					981							
15	-11°736	-24°706	65	1452	9°6	11	+5°326	-23°684			11	+19°281	-22°815			10	+30°975	-1°362					
12	-11°308	-31°045			16	+5°353	-37°921	65	1472	9°5	10	+19°340	-19°326			20	+31°344	-62°230	65	1509	9°2		
9	-11°257	-43°568			11	+5°434	-21°298			10	+19°467	-42°829			9	+31°392	-41°631						
13	-11°039	-36°777	65	1453	9°7	9	+5°751	-40°520			11	+19°554	-2°305			9	+31°516	-29°110					
12	-10°832	-53°040	65	1454	9°7	9	+5°752	-24°147			9	+19°794	-49°145			12	+31°517	-13°888	65	1507	9°9		
9	-10°721	-52°436			10	+6°323	-2°668			12	+20°074	-33°202			9	+31°641	-56°697						
9	-10°389	-58°382			18	+7°294	-13°728	65	1473	9°2	12	+20°110	-13°384	65	1493	9°8	22	+31°976	-24°181	65	1508	8°7	
11	-10°227	-26°751			10	+7°305	-40°936			10	+20°393	-11°483			14	+32°785	-13°135	65	1510	9°6			
16	-10°083	-30°003	65	1456	9°6	11	+7°489	-45°373			9	+20°582	-26°949			9	+32°932	-62°328					
9	-9°928	-61°286			12	+7°637	-27°628	65	1474	9°9	11	+20°716	-47°906			10	+34°193	-0°178					
	811					871					931					991							
9	-9°842	-32°333			9	+7°778	-36°697			12	+20°722	-29°097			12	+34°507	-21°383	65	1512	9°7			
9	-9°232	-35°235			9	+8°006	-41°164			9	+20°888	-0°672			11	+34°535	-28°394						
10	-9°232	-23°003			12	+8°339	-29°677			11	+20°925	-45°370			10	+34°681	-10°386						
10	-8°857	-50°297			14	+8°586	-46°997	65	1475	9°7	11	+21°081	-37°861			11	+34°698	-20°853					
24	-8°580	-34°878	65	1457	8°4	9	+8°686	-43°436			12	+21°184	-34°480			10	+35°116	-39°294					
11	-8°546	-11°858			15	+8°722	-36°487	65	1476	9°6	16	+21°381	-39°528	65	1494	9°5	10	+35°612	-22°035				
10	-8°254	-4°813			19	+9°027	-41°712	65	1477	9°3	9	+21°416	-62°038			17	+35°766	-9°671	65	1513	9°6		
10	-8°189	-3°978			11	+9°035	-29°645			9	+21°437	-55°357			13	+35°937	-50°810	65	1514	9°8			
9	-8°082	-36°822			10	+9°485	-30°144			11	+21°568	-34°403	65	1495	9°7	19	+36°414	-53°056	65	1515	9°1		
10	-7°926	-33°406			15	+9°673																	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
	1011,					1071,					51,			
10	+39.018	-1.897			13	+52.830	-42.127	65 1534	9.6			-51.196	+8.213	64 1519 9.2
9	+39.124	-50.870			9	+53.170	-62.111			10	-51.043	+1.240		
9	+39.192	-48.374			11	+53.528	-31.736			10	-51.019	+48.090		
9	+39.330	-8.423			10	+53.842	-12.147			15	-50.783	+39.673	64 1522	9.6
13	+39.574	-49.438	65 1519	9.6	11	+54.960	-14.679	65 1535	9.9	11	-50.406	+46.296		
16	+39.613	-10.332	65 1518	9.4	11	+55.698	-42.539			9	-50.303	+47.524		
15	+40.358	-4.922	64 1491	9.6	10	+56.031	-8.668			10	-50.099	+8.313		
11	+40.478	-5.731			10	+56.060	-21.602			9	-49.545	+32.661		
9	+40.483	-22.415			10	+56.180	-5.932			26	-48.354	+43.160	64 1523	9.0
11	+40.713	-63.342			13	+57.555	-49.949	65 1536	9.5	10	-48.242	+47.163		
	1021					1081					61			
9	+40.990	-34.848			12	+57.898	-41.246	65 1537	9.8	10	-47.866	+55.655		
16	+41.050	-0.758	64 1493	9.5	11	+58.101	-4.945	64 1508	9.9	15	-47.825	+36.926	64 1525	9.5
11	+41.324	-17.126			9	+58.850	-15.909			10	-47.476	+26.634		
9	+42.106	-40.818			11	+58.912	-37.787	65 1538	9.9	12	-47.438	+51.367	64 1527	9.8
9	+42.243	-20.206			10	+59.263	-25.193			13	-47.408	+20.316	64 1524	9.9
11	+42.297	-55.989			9	+59.291	-43.365			9	-47.267	+36.781		
9	+43.436	-24.817			10	+59.411	-6.536			10	-47.144	+45.654		
10	+43.818	-38.410			9	+60.828	-38.157			9	-47.091	+42.890		
9	+44.224	-40.188			12	+60.898	-23.428	65 1539	9.7	15	-46.900	+60.396	63 1738	9.6
9	+44.712	-3.281			18	+60.974	-3.546	64 1510	9.0	10	-46.826	+48.122		
	1031					1091					71			
9	+44.799	-21.489			9	+61.085	-47.282			12	-60.047	+50.186	64 1505	9.6
9	+44.848	-16.941			10	+61.404	-1.654			11	-59.840	+35.530		
12	+44.930	-5.172	64 1497	9.9	13	+61.591	-0.339	64 1512	9.7	12	-59.497	+53.657	63 1716	9.6
12	+45.039	-4.526	64 1498	9.8	11	+62.061	-30.374			9	-59.041	+27.374		
9	+45.076	-24.442			13	+62.155	-16.892	65 1540	9.6	9	-58.953	+54.671		
12	+45.125	-49.870	65 1520	9.8	9	+62.179	-3.647			12	-58.815	+21.895		
10	+45.208	-11.156			11	+62.706	-4.341	64 1515	9.8	10	-58.348	+49.260		
10	+45.696	-32.460			12	+63.225	-17.105	65 1541	9.8	10	-58.034	+55.953		
10	+45.844	-15.274			9	+63.354	-6.854			12	-58.003	+63.910	63 1720	9.6
9	+46.587	-28.808			14	+63.486	-6.230	64 1517	9.8	12	-57.952	+4.588	64 1506	9.7
	1041					1101					21			
9	+47.170	-15.269			12	+63.586	-4.462	64 1518	9.6	9	-57.916	+16.943		
10	+47.173	-37.221			11	+63.932	-3.022			12	-57.635	+64.618	63 1721	9.9
11	+47.276	-46.847			13	+64.535	-50.987	65 1543	9.6	14	-57.631	+9.679	64 1507	9.7
11	+47.303	-50.750			9	+64.705	-19.853			11	-57.039	+62.997		
10	+47.574	-13.601			15	+64.742	-24.267	65 1542	9.6	11	-56.965	+28.240		
9	+47.604	-52.058			9	+64.779	-52.821			10	-56.195	+6.047		
11	+47.607	-25.528								10	-56.023	+42.378		
11	+47.851	-48.018	65 1521	9.9						9	-55.854	+24.214		
10	+48.080	-49.682								10	-55.522	+63.660		
20	+48.148	-57.033	65 1522	9.3						16	-55.170	+5.281	64 1509	9.5
	1051										31			
11	+48.231	-32.514			12	-55.123	+32.741	64 1511	9.6	12	-55.123	+32.741	64 1511	9.6
11	+49.087	-61.833	65 1526	9.8	13	-54.853	+37.587	64 1514	9.9	13	-54.853	+37.587		
9	+49.581	-30.116			10	-54.821	+59.689			10	-54.821	+59.689		
18	+49.587	-49.008	65 1527	9.2	10	-54.595	+5.843			10	-54.595	+5.843		
16	+49.618	-59.827	65 1528	9.3	9	-54.272	+37.996			9	-54.272	+37.996		
9	+49.640	-11.024								18	-54.219	+7.222	64 1513	9.4
9	+49.698	-51.012								10	-53.857	+6.683		
10	+49.768	-52.020								10	-53.546	+2.922		
11	+49.787	-55.636	65 1529	9.8						10	-53.498	+28.041		
11	+49.968	-15.050	65 1523	9.9						15	-53.356	+24.795	64 1516	9.7
	1061										41			
10	+50.130	-15.485	65 1524	9.9						9	-53.234	+19.434		
9	+50.208	-52.305								10	-53.024	+10.916		
11	+50.214	-15.250	65 1525	9.9						12	-52.614	+8.179		
10	+50.589	-26.404								9	-52.433	+26.474		
13	+51.602	-48.853	65 1532	9.5						10	-52.387	+32.595		
17	+51.790	-53.274	65 1533	9.4						10	-51.985	+51.716		
18	+52.274	-9.143	65 1530	9.4						11	-51.933	+62.849		
11	+52.412	-7.090								12	-51.917	+49.206	64 1521	9.8
12	+52.486	-10.697	65 1531	9.8						16	-51.484	+15.819	64 1520	9.6
9	+52.787	-38.012								12	-51.375	+55.845	63 1728	9.8

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
18	-40°075	+19°013	64 1544	9.4	11	-27°049	+34°729	64 1559	9.9	12	-15°789	+7°942	64 1572	9.7	10	-0°566	+31°939	64 1592	9.2
11	-40°023	+4°009			12	-27°037	+32°520			10	-15°638	+44°238			18	-0°556	+45°711		
9	-39°504	+45°767			12	-26°809	+32°335			9	-15°489	+59°163			10	-0°540	+36°667		
12	-39°328	+34°092			9	-26°678	+46°258			12	-15°294	+48°938			9	-0°462	+51°987		
11	-39°229	+7°599			12	-26°599	+43°466			10	-14°880	+29°626			14	-0°055	+26°607	64 1593	9.7
10	-39°015	+24°077			11	-26°580	+40°028			11	-14°409	+41°586			13	-0°054	+23°639	64 1595	9.8
11	-38°942	+14°028			16	-26°442	+4°750	64 1558	9.5	12	-14°218	+50°584			12	+0°042	+52°058	64 1594	9.9
11	-38°757	+8°342			9	-26°392	+25°662			11	-14°081	+83°846			12	+0°149	+42°684	64 1596	9.8
11	-38°726	+35°167			11	-26°288	+15°567			13	-14°005	+48°552	64 1572	9.7	10	+0°370	+32°614		
10	-38°492	+30°612			9	-26°257	+36°225			11	-13°438	+41°832			10	+0°423	+47°142		
	121					181					241					301			
11	-38°421	+5°539	64 1546	9.6	15	-26°243	+51°247	64 1560	9.5	10	-12°732	+46°481	64 1573	9.6	11	+0°710	+4°197	64 1597	9.9
11	-38°402	+61°771			10	-26°024	+22°748			16	-12°286	+30°619			10	+0°831	+11°694		
11	-37°984	+4°747			11	-25°747	+32°378			30	-11°815	+45°044			12	+1°171	+43°830		
18	-37°325	+22°260			10	-25°388	+24°106			16	-11°297	+46°736			10	+1°693	+12°606		
9	-36°556	+28°521			10	-25°298	+7°944			11	-11°093	+54°506	64 1575	9.6	18	+2°431	+62°649	63 1786	9.4
14	-36°497	+25°827	64 1547	9.7	10	-25°073	+28°818			10	-10°989	+19°359			20	+2°641	+18°945	64 1598	9.4
11	-36°109	+15°641			15	-24°950	+58°784	63 1760	9.4	10	-10°793	+59°075			9	+2°725	+40°863		
12	-35°944	+62°994			11	-24°833	+47°452			9	-10°697	+19°764			11	+2°909	+48°290		
14	-35°760	+17°505	64 1548	9.8	11	-24°791	+60°888			12	-10°656	+42°436			11	+2°975	+44°162		
10	-35°611	+2°042			12	-24°660	+36°891	64 1562	9.9	12	-10°399	+3°856	64 1576	9.9	10	+3°181	+24°485		
	131					191					251					311			
16	-35°486	+32°834	64 1549	9.4	20	-24°574	+36°167	64 1563	9.2	11	-9°712	+42°786			9	+3°266	+48°722		
9	-35°202	+63°045			11	-24°457	+24°531			11	-9°626	+38°817			11	+3°649	+45°021		
20	-34°542	+43°328	64 1550	9.4	11	-24°408	+30°511			10	-9°135	+4°695			10	+4°018	+9°117		
11	-34°183	+53°345			13	-24°302	+4°912	64 1561	9.9	15	-8°753	+26°887	64 1578	9.7	11	+4°346	+30°753		
9	-33°969	+60°470			26	-23°788	+24°020	64 1564	9.0	15	-8°575	+41°086	64 1579	9.6	11	+4°513	+37°807		
9	-33°960	+22°159			11	-23°413	+8°212			12	-8°351	+41°805	64 1580	9.6	12	+4°572	+34°842	64 1600	9.8
9	-33°725	+50°473			10	-23°396	+42°360			12	-8°282	+37°817			10	+4°596	+62°462		
9	-33°548	+39°481			12	-23°164	+21°498			11	-8°266	+24°661			15	+4°671	+23°754	64 1601	9.8
9	-33°367	+27°784			10	-22°922	+46°343			14	-8°194	+25°868	64 1581	9.6	10	+5°129	+22°495		
12	-33°315	+3°518			11	-22°810	+11°523			11	-8°150	+34°349			10	+5°215	+15°340		
	141					201					261					321			
9	-33°045	+25°350	64 1551	9.6	12	-22°386	+58°395	63 1764	9.8	10	-7°808	+14°245	64 1582	9.9	10	+5°247	+4°560	64 1602	9.6
11	-32°808	+1°326			9	-21°614	+24°821			11	-7°807	+2°674			12	+5°407	+35°183		
9	-32°469	+64°976			12	-21°332	+5°909	64 1566	9.9	10	-7°788	+38°343			10	+5°442	+50°428		
11	-32°296	+11°894			16	-21°268	+13°685	64 1568	9.6	10	-7°621	+34°236			16	+5°505	+44°468		
13	-32°076	+36°460			15	-21°263	+0°482	64 1565	9.6	11	-7°344	+6°671			12	+5°663	+55°888	63 1793	9.9
12	-32°013	+55°863	63 1755	9.9	11	-21°239	+15°188			12	-7°343	+48°024	64 1584	9.9	10	+5°707	+15°243		
10	-31°857	+49°557			10	-21°229	+51°535			11	-7°140	+36°054			9	+5°795	+19°512		
11	-31°324	+48°060			10	-21°096	+27°535			12	-6°799	+41°556			9	+6°095	+51°658		
11	-31°154	+28°137			12	-20°940	+64°862			11	-6°371	+61°826			12	+6°628	+64°811		
10	-30°698	+0°436			10	-20°884	+10°471			9	-5°886	+31°671			9	+6°937	+36°585		
	151					211					271					331			
11	-30°494	+37°059	64 1554	9.4	11	-20°858	+42°352			11	-5°729	+22°287	63 1780	9.6	10	+6°958	+8°601	64 1606	9.2
10	-30°428	+1°363			9	-20°225	+43°754			15	-5°721	+52°969			10	+7°236	+63°763		
20	-30°402	+44°148			13	-20°154	+15°392			9	-5°595	+43°184			10	+7°347	+40°713		
12	-30°353	+6°059			9	-19°548	+61°016			12	-5°369	+64°498	63 1781	9.7	9	+7°442	+45°432		
11	-30°022	+30°999			11	-19°356	+9°148			10	-5°337	+20°781			21	+7°718	+0°292		
16	-29°673	+37°661	64 1555	9.6	13	-19°020	+21°349	64 1569	9.7	12	-4°858	+51°205			16	+7°791	+37°304	64 1605	9.6
9	-29°628	+8°091			10	-19°012	+21°109			18	-4°652	+38°851	64 1585	9.3	9	+7°807	+48°526		
9	-29°423	+10°252			11	-18°898	+17°968			11	-4°485	+36°247	64 1586	9.9	12	+8°411	+4°440	64 1607	9.9
11	-29°300	+0°141			9	-18°870	+43°878			10	-4°278	+17°865			14	+9°483	+49°920	64 1608	9.7
11	-28°931	+7°279			11	-18°781	+33°057			11	-3°851	+37°263			9	+9°653	+26°213		
	161					221					281					341			
10	-28°853	+0°950	64 1556	9.9	10	-18°261	+45°631			24	-3°752	+29°259	64 1587	9.2	12	+9°692	+9°879	64 1609	9.8
9	-28°500	+12°785			9	-18°090	+40°356			10	-3°600	+16°242			12	+9°737	+45°720		
13	-28°359	+43°139			10	-17°994	+43°390			11	-3°179	+11°569			9	+10°075	+43°831		
9	-27°915	+39°473			10	-17°921	+22°103			11	-3°146	+42°977			9	+10°441	+19°928		
11	-27°804	+27°118			12	-17°914	+8°529	64 1570	9.8	18	-2°806	+16°262	64 1588	9.5	10	+10°758	+58°860		
9	-27°686	+46°858			22	-17°145	+63°995	63 1771	9.1	11	-2°470	+22°737			11	+10°772	+1°593		
12	-27°594	+55°571			10	-16°998	+21°175			13	-2°294	+23°960	64 1589	9.8	11	+10°932	+28°969		
32	-27°355	+13°690	64 1557	9.0	9	-16°438	+47°876			28	-1°779	+23°342	64 1590	9.2	9	+11°016	+51°742		
11	-27°118	+29°407			10	-16°082	+53°538			10	-1°685	+5°857			9	+11°101	+52°636		
10	-27°063	+44°226			10	-15°955	+9°352			11	-0°758	+21°927			24	+11°603	+50°437	64 1610	9.0

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
12	+11° 647	+24° 679			18	+26° 650	+26° 335	64 1624	9° 6	12	+44° 749	+8° 969			14	-61° 615	-60° 304	65 1528	9° 3
9	+11° 769	+48° 881			12	+27° 118	+36° 316	64 1625	9° 9	9	+45° 244	+54° 658			9	-61° 536	-52° 781		
9	+11° 775	+40° 257			9	+27° 349	+2° 180			9	+45° 266	+54° 883			10	-60° 820	-12° 458		
13	+11° 890	+55° 898	63 1802	9° 8	22	+27° 918	+29° 195	64 1626	9° 3	22	+45° 640	+34° 860	64 1632	9° 1	9	-60° 789	-6° 309		
9	+11° 890	+45° 051			9	+28° 148	+51° 586			9	+46° 273	+48° 917			13	-60° 411	-49° 228	65 1532	9° 5
9	+11° 937	+49° 162			10	+28° 284	+22° 324			11	+46° 935	+35° 524			9	-60° 023	-38° 332		
10	+12° 025	+32° 780			18	+28° 454	+58° 830	63 1822	9° 2	11	+47° 060	+59° 146			18	-59° 926	-53° 628	65 1533	9° 4
9	+12° 306	+22° 463			11	+28° 719	+45° 090			9	+47° 200	+57° 010			11	-59° 710	-32° 014		
14	+12° 408	+21° 640	64 1611	9° 6	18	+28° 928	+56° 208	63 1825	9° 3	36	+47° 484	+63° 237	63 1843	8° 8	15	-59° 671	-42° 419	65 1534	9° 6
11	+12° 483	+47° 740			11	+29° 068	+47° 221			10	+47° 766	+23° 315			12	-59° 521	-14° 890	65 1535	9° 9
	361					421					481					541			
11	+12° 581	+40° 387			9	+29° 326	+54° 420			40	+47° 849	+6° 109	64 1633	8° 6	9	-59° 287	-8° 569		
10	+12° 665	+48° 009			10	+29° 415	+39° 918			11	+48° 013	+17° 313			10	-58° 924	-6° 083		
11	+12° 699	+44° 447			22	+30° 341	+0° 866	64 1628	9° 2	40	+48° 294	+56° 338	63 1845	8° 6	11	-58° 883	-8° 834		
10	+13° 313	+54° 739			10	+30° 453	+19° 039			11	+48° 701	+34° 841			10	-57° 928	-21° 721		
30	+13° 547	+12° 875	64 1614	9° 2	10	+30° 696	+26° 862			9	+48° 795	+47° 118			9	-57° 595	-23° 252		
12	+13° 707	+25° 317			9	+30° 755	+17° 924			9	+49° 906	+53° 195			13	-57° 090	-4° 970	64 1508	9° 9
11	+14° 106	+46° 581			11	+31° 182	+50° 924			12	+50° 041	+0° 063			11	-56° 779	-42° 619		
9	+14° 129	+20° 982			13	+31° 310	+51° 928	64 1627	9° 7	11	+50° 723	+60° 436			9	-56° 768	-3° 320		
9	+14° 251	+48° 023			11	+31° 425	+17° 031			13	+51° 316	+16° 385			9	-56° 634	-0° 086		
56	+14° 511	+51° 036	64 1615	8° 0	10	+32° 431	+60° 177			9	+52° 021	+1° 175			11	-55° 660	-6° 458		
	371					431					491					551			
10	+14° 515	+46° 830			11	+32° 781	+60° 063			10	+52° 238	+38° 422			10	-55° 551	-15° 843		
16	+14° 775	+62° 127	63 1810	9° 5	9	+32° 868	+26° 122			9	+52° 586	+29° 363			9	-55° 538	-54° 875		
12	+14° 868	+40° 949			10	+33° 410	+32° 519			10	+53° 302	+15° 807			14	-54° 695	-41° 168	65 1537	9° 8
10	+15° 152	+46° 357			13	+33° 937	+49° 940			9	+54° 068	+60° 925			11	-54° 479	-25° 068		
11	+15° 856	+10° 955			48	+34° 146	+1° 462	64 1629	8° 3	10	+54° 103	+21° 530			14	-54° 404	-49° 882	65 1536	9° 5
10	+15° 961	+8° 653			11	+34° 286	+44° 756			14	+54° 898	+21° 299			24	-54° 328	-3° 362	64 1510	9° 0
17	+16° 003	+14° 639	64 1618	9° 6	9	+34° 364	+18° 857			12	+54° 941	+6° 156			10	-54° 030	-1° 441		
9	+16° 031	+47° 218			11	+35° 065	+33° 242			15	+55° 781	+39° 968			13	-53° 927	-0° 113	64 1512	9° 7
30	+16° 781	+8° 603	64 1619	9° 2	12	+35° 231	+47° 162			13	+56° 007	+5° 118			11	-53° 919	-37° 658	65 1538	9° 9
9	+17° 694	+30° 396			58	+35° 564	+42° 100	64 1630	7° 1	11	+56° 139	+38° 530			10	-53° 149	-43° 181		
	381					441					501					561			
15	+17° 942	+59° 104	63 1813	9° 6	12	+36° 010	+1° 467			12	+56° 880	+26° 427			9	-53° 121	-3° 371		
12	+18° 122	+33° 452			9	+36° 056	+57° 498			9	+57° 524	+21° 127			9	-53° 076	-21° 589		
20	+18° 377	+47° 966	64 1620	9° 2	18	+36° 120	+58° 150	63 1834	9° 4	9	+58° 712	+6° 668			12	-52° 973	-23° 195	65 1539	9° 7
9	+18° 515	+52° 274			9	+36° 203	+25° 734			11	+59° 400	+35° 060			13	-52° 551	-4° 037	64 1515	9° 8
12	+18° 554	+26° 143			10	+36° 574	+61° 855			9	+59° 809	+12° 185			16	-52° 192	-16° 590	65 1540	9° 6
10	+18° 655	+12° 160			9	+37° 467	+33° 849			9	+60° 390	+43° 263			10	-51° 967	-37° 902		
9	+18° 760	+18° 080			9	+37° 810	+2° 906			9	+61° 463	+35° 529			10	-51° 711	-6° 485		
9	+18° 792	+50° 188			10	+38° 066	+46° 179			10	+62° 713	+31° 970			15	-51° 646	-4° 092	64 1518	9° 6
11	+18° 956	+39° 142			12	+38° 247	+35° 258			12	+62° 926	+1° 954			14	-51° 623	-5° 855	64 1517	9° 8
9	+19° 529	+50° 568			11	+38° 261	+10° 472			14	+63° 487	+6° 984	64 1634	9° 6	13	-51° 416	-2° 627		
	391					451					511					571			
9	+19° 817	+15° 866			11	+39° 298	+6° 948			19	+63° 711	+12° 555	64 1635	9° 4	12	-51° 309	-30° 031		
11	+20° 998	+33° 928			10	+39° 607	+50° 993			38	+63° 818	+6° 054	64 1636	8° 6	12	-51° 102	-16° 718	65 1541	9° 8
12	+21° 076	+35° 342			10	+39° 803	+6° 621			13	+64° 606	+3° 732			11	-51° 084	-46° 962		
13	+21° 241	+64° 021	63 1814	9° 8	12	+40° 431	+19° 121			11	+64° 946	-33° 166			9	-50° 973	-39° 844		
11	+21° 274	+39° 458			12	+40° 553	+52° 270			10	+64° 868	-47° 532			10	-49° 657	-26° 585		
18	+21° 684	+62° 573	63 1815	9° 4	9	+41° 711	+28° 833			10	+64° 574	-51° 409			10	-49° 439	-19° 342		
9	+21° 737	+49° 580			11	+41° 888	+35° 187			11	+64° 475	-15° 620	65 1523	9° 9	9	-49° 233	-28° 128		
9	+22° 301	+58° 697			14	+42° 117	+51° 868	64 1631	9° 6	11	+64° 268	-16° 046	65 1524	9° 9	16	-49° 076	-23° 756	65 1542	9° 6
9	+23° 800	+56° 493			12	+42° 141	+64° 873			11	+64° 215	-48° 648	65 1521	9° 9	10	-48° 772	-2° 773		
12	+24° 018	+45° 228			12	+42° 336	+12° 672			11	+64° 214	-15° 804	65 1525	9° 9	9	-48° 689	-24° 735		
	401					461					521					581			
9	+24° 557	+0° 755			10	+42° 439	+52° 426			10	+63° 856	-50° 310			9	-48° 633	-3° 105		
12	+24° 675	+45° 112			11	+42° 732	+18° 217			16	+63° 274	-57° 632	65 1522	9° 3	11	-47° 970	-14° 180		
10	+25° 124	+59° 666			12	+43° 069	+0° 283			10	+63° 018	-26° 909			11	-47° 775	-2° 213		
9	+25° 355	+40° 514			12	+43° 635	+61° 375			19	+62° 598	-9° 580	65 1530	9° 4	11	-47° 673	-33° 762	65 1544	9° 9
48	+25° 514	+55° 815	63 1819	7° 3	13	+43° 772	+13° 338			12	+62° 595	-7° 511			14	-47° 372	-50° 412	65 1543	9° 6
9	+25° 614	+64° 666			14	+43° 784	+57° 564	63 1838	9° 6	18	+62° 408	-49° 526	65 1527	9° 2	10	-47° 171	-5° 445		
16	+25° 670	+8° 258	64 1622	9° 5	26	+44° 137	+61° 547	63 1840	9° 2	12	+62° 262	-11° 104	65 1531	9° 8	11	-47° 006	-52° 210		
34	+25° 736	+7° 305	64 1623	8° 8	14	+44° 210	+16° 537			11	+62° 006	-62° 328	65 1526	9° 8	22	-46° 332	-4° 918	64 1526	9° 1
15	+26° 015	+58° 801	63 1821	9° 4	13	+44° 302	+39° 743			10	+62° 005	-52° 511			10	-45° 960	-7° 837		
10	+26° 491	+8° 359			10	+44° 648	+62° 295			10	+61° 736	-56° 112	65 1529	9° 8	10	-45° 548	-55° 891		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591,					651,					711,					771,			
12	-45° 532	- 9° 909			12	-32° 167	-51° 145	65 1560	9° 9	10	-15° 551	-13° 918			14	+ 5° 268	-14° 676	65 1591	9° 6
13	-45° 422	- 3° 859	64 1528	9° 9	12	-32° 120	-58° 327	65 1559	9° 8	21	-15° 205	-26° 047	65 1577	9° 2	16	+ 6° 075	-44° 362	65 1592	9° 6
12	-45° 406	-29° 106			12	-31° 882	- 2° 636			14	-14° 572	- 5° 286	64 1571	9° 7	9	+ 6° 081	-42° 830		
10	-45° 368	- 7° 995			10	-31° 225	-37° 749			11	-13° 152	-14° 301			11	+ 6° 108	-52° 524		
13	-45° 368	-37° 293	65 1545	9° 8	18	-31° 002	- 0° 362	64 1552	9° 4	10	-13° 062	- 2° 145			11	+ 6° 468	-43° 334		
9	-44° 930	-17° 561			12	-30° 879	-25° 533	65 1562	9° 8	12	-12° 218	-10° 013	65 1578	9° 9	15	+ 6° 593	- 6° 447	64 1603	9° 6
10	-44° 909	-15° 180			18	-30° 380	-28° 970	65 1563	9° 5	11	-11° 780	-51° 211			56	+ 6° 735	-28° 888	65 1593	8° 0
9	-44° 663	-38° 286			11	-30° 332	- 4° 446			11	-11° 741	- 7° 256			13	+ 6° 883	-40° 771		
11	-44° 596	- 6° 948			16	-30° 134	- 6° 468	64 1553	9° 6	11	-11° 429	-42° 550			38	+ 6° 926	- 2° 528	64 1604	8° 8
12	-44° 263	- 6° 669			11	-30° 124	-51° 346			12	-10° 897	-31° 892	65 1579	9° 9	9	+ 7° 170	-21° 806		
	601					661					721					781			
11	-44° 252	-61° 831	65 1546	9° 9	12	-30° 060	- 0° 320			9	-10° 774	-29° 563			38	+ 7° 337	-64° 434	65 1594	8° 6
9	-44° 195	- 7° 300			9	-29° 258	-18° 561			9	-10° 691	- 0° 138			11	+ 7° 609	-56° 958		
19	-43° 607	- 8° 877	65 1547	9° 4	12	-29° 127	-54° 241	65 1564	9° 9	9	- 9° 663	-39° 840			9	+ 8° 471	-48° 469		
12	-43° 295	-17° 150			9	-29° 117	-35° 531			13	- 9° 167	- 4° 032	64 1577	9° 9	10	+ 9° 044	-52° 973		
9	-43° 259	-22° 651			9	-28° 870	-25° 475			10	- 8° 785	-39° 765			11	+ 9° 323	-55° 934		
9	-42° 988	-22° 387			12	-28° 201	- 4° 495			11	- 8° 535	-52° 873			13	+ 9° 549	-63° 695	65 1595	9° 5
15	-42° 849	- 6° 700	64 1536	9° 7	10	-28° 119	- 5° 252			11	- 8° 192	-10° 381			11	+ 9° 725	-14° 005		
11	-41° 650	-48° 449			24	-27° 997	-36° 945	65 1565	9° 1	11	- 8° 190	- 6° 294			10	+ 9° 811	-26° 714		
14	-41° 257	- 0° 275	64 1541	9° 8	22	-27° 875	-36° 769			11	- 8° 061	-56° 149			10	+10° 682	-41° 045		
10	-40° 981	-10° 544			11	-27° 106	-15° 013			12	- 7° 822	- 2° 594	64 1583	9° 9	13	+10° 802	-59° 616	65 1596	9° 9
	611					671					731					791			
10	-40° 391	- 1° 399			11	-27° 077	-35° 783			9	- 7° 797	-55° 623			11	+10° 900	-59° 369		
13	-40° 366	-28° 292	65 1549	9° 8	26	-26° 851	-55° 658	65 1566	9° 2	9	- 7° 730	-50° 987			10	+11° 183	-58° 564		
12	-40° 126	-59° 333	65 1548	9° 9	12	-26° 680	-18° 227	65 1567	9° 9	11	- 7° 033	-43° 416			9	+11° 241	-27° 805		
11	-39° 907	-10° 255			10	-26° 172	-31° 934			10	- 7° 013	-51° 247			12	+11° 554	-42° 603		
9	-39° 798	- 2° 772			22	-26° 085	-38° 975	65 1569	9° 2	10	- 6° 837	-10° 428			12	+11° 967	-50° 069	65 1597	9° 9
9	-39° 642	-35° 852			16	-26° 028	-47° 062	65 1568	9° 6	12	- 6° 674	-30° 904	65 1581	9° 9	11	+12° 017	-20° 369		
15	-39° 203	-53° 150	65 1550	9° 5	11	-25° 473	- 7° 723			9	- 6° 089	-14° 362			22	+12° 131	-44° 410	65 1598	9° 2
9	-39° 200	-18° 873			10	-24° 568	-43° 402			12	- 5° 822	-61° 010			9	+12° 190	-19° 674		
9	-39° 111	-62° 109			9	-24° 029	-36° 057			13	- 5° 204	-63° 750	65 1583	9° 9	34	+12° 246	-39° 235	65 1599	8° 8
12	-38° 527	-55° 362			18	-23° 548	-27° 150	65 1570	9° 4	9	- 3° 810	-16° 002			9	+12° 585	-20° 705		
	621					681					741					801			
12	-38° 516	-52° 787	65 1551	9° 9	11	-23° 512	-62° 332			10	- 3° 368	-57° 787			12	+12° 677	- 1° 885	64 1612	9° 8
14	-38° 397	-59° 786	65 1552	9° 8	10	-23° 389	-38° 467			12	- 3° 090	-62° 792			20	+12° 800	- 0° 377	64 1613	9° 4
20	-38° 269	- 8° 001	64 1545	9° 2	13	-23° 301	-27° 996	65 1571	9° 8	40	+ 2° 968	-62° 026	65 1584	8° 9	20	+12° 950	-10° 627	65 1600	9° 3
10	-38° 096	-20° 393			10	-23° 225	- 7° 718			11	- 2° 784	- 5° 689			9	+13° 382	-53° 397		
14	-37° 896	-30° 651	65 1555	9° 8	16	-23° 072	-29° 047	65 1572	9° 4	10	- 2° 054	-31° 739			13	+13° 564	-49° 065		
14	-37° 879	-43° 426	65 1553	9° 6	11	-22° 814	-19° 679			18	- 1° 754	-21° 671	65 1585	9° 4	12	+13° 588	-55° 103		
9	-37° 859	-53° 934			16	-22° 794	-44° 731	65 1573	9° 6	42	- 1° 500	-13° 412	65 1586	8° 5	9	+14° 099	-11° 362		
10	-37° 631	-19° 958			10	-22° 156	-32° 490			9	- 1° 432	- 5° 033			10	+14° 139	-40° 317		
9	-37° 819	-37° 319			12	-21° 930	-60° 526			12	- 1° 282	-36° 844			12	+14° 147	- 1° 531	64 1616	9° 8
12	-37° 518	-49° 517	65 1554	9° 9	10	-21° 780	-63° 948			23	- 1° 180	- 5° 300	64 1591	9° 2	11	+14° 264	-20° 648		
	631					691					751					811			
10	-37° 419	-42° 978			10	-21° 575	-59° 761			40	- 1° 127	-30° 006	65 1587	9° 0	9	+14° 838	-11° 844		
11	-37° 266	- 1° 873			10	-21° 469	-21° 868			12	- 0° 954	-59° 199			10	+15° 220	-20° 537		
10	-36° 674	- 7° 659			14	-21° 333	- 3° 062	64 1567	9° 6	10	- 0° 897	-54° 639			20	+15° 254	-54° 493	65 1601	9° 3
14	-36° 196	-45° 726	65 1556	9° 8	11	-20° 902	-63° 150			9	- 0° 838	- 8° 190			15	+15° 474	- 5° 677	64 1617	9° 6
11	-35° 932	- 2° 890			16	-20° 887	-12° 243	65 1574	9° 6	14	- 0° 798	-42° 561	65 1588	9° 8	16	+15° 827	-54° 581	65 1602	9° 4
9	-35° 9																		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	831,					891,					951,				PLATE CENTRE.				
															11h 15m, - 65°.				
															Plate 1225. 1895, Apr. 24.				
															PROVISIONAL CONSTANTS.				
															a = - .01147 d = + .00090				
															b = - .00052 e = - .01118				
															c = + .0309 f = + .1142				
															To obtain standard co-ordinates, ξ, η				
															$\xi = x + ax + by + c$				
															$\eta = y + dx + ey + f$				
24	+21.560	-29.635	65 1606	9.0	10	+37.555	-31.572			10	+50.530	-30.185			11	-62.445	+39.714		
9	+21.702	-13.310			9	+37.910	-42.864			12	+50.629	-27.834			10	-62.024	+21.006		
15	+21.981	-50.565	65 1608	9.7	15	+38.164	-60.396	65 1624	9.7	12	+50.682	-48.261			9	-62.001	+38.277		
13	+22.221	-36.669	65 1609	9.7	11	+38.275	-54.746			10	+50.885	-20.620			9	-61.007	+38.565		
14	+22.487	-32.188	65 1610	9.7	9	+38.536	-0.156			10	+52.004	-30.588			9	-60.931	+5.901		
14	+22.502	-11.276	65 1607	9.8	9	+38.592	-28.851			12	+52.158	-6.095			9	-60.378	+26.237		
11	+22.543	-2.659			12	+39.142	-25.288			10	+52.816	-25.008			10	-59.788	+4.947		
13	+22.655	-41.340	65 1611	9.8	10	+39.445	-59.442			10	+52.845	-32.257			9	-58.508	+35.051		
11	+22.743	-35.251			12	+39.495	-13.202			12	+52.898	-50.091			9	-57.224	+6.675		
10	+23.046	-29.419			11	+39.671	-30.600			11	+53.176	-29.944			9	-57.096	+48.356		
	841					901					961				11				
11	+23.820	-53.689			9	+39.800	-40.674			38	+53.410	-36.942	65 1633	8.8	9	-56.470	+35.649		
30	+23.843	-2.234	64 1621	9.2	11	+39.830	-25.281			10	+53.742	-45.356			9	-54.980	+32.199		
10	+23.879	-59.599			15	+39.916	-1.181			11	+55.751	-14.086			9	-53.539	+34.635		
12	+23.983	-54.999			10	+40.309	-33.166			16	+56.180	-20.882	65 1634	9.5	10	-52.684	+2.267		
10	+24.598	-11.264			11	+40.339	-8.875			11	+56.383	-9.844			15	-52.636	+12.892	64 1635	9.4
9	+25.235	-63.626			13	+40.532	-43.230			9	+56.637	-59.133			11	-52.459	+7.326	64 1634	9.6
9	+25.277	-22.700			9	+40.665	-57.838			9	+56.684	-56.775			25	-52.142	+6.480	64 1636	8.6
15	+25.463	-37.781	65 1612	9.7	12	+40.676	-53.444			9	+57.059	-6.500			9	-51.858	+23.674		
20	+25.687	-43.074	65 1613	9.4	9	+40.846	-9.983			9	+57.540	-4.048			10	-51.116	+4.156		
12	+26.039	-56.692	65 1614	9.9	10	+40.912	-24.877			20	+57.691	-10.090	65 1635	9.2	12	-50.504	+41.445	64 1637	9.5
	851					911					971				21				
10	+26.588	-23.147			17	+41.242	-61.316	65 1626	9.5	9	+57.977	-18.235			9	-49.553	+36.160		
10	+26.685	-64.396			12	+41.422	-27.900			16	+58.003	-55.593	65 1636	9.6	9	-49.542	+8.453		
10	+27.280	-13.418			18	+41.853	-16.474	65 1625	9.2	15	+58.355	-3.093			9	-49.536	+53.991		
10	+27.506	-51.829			11	+42.038	-1.015			9	+58.610	-2.582			9	-49.206	+44.311		
13	+27.507	-31.990	65 1615	9.8	10	+42.091	-15.030			11	+58.929	-53.140			14	-49.086	+8.187	64 1638	9.6
9	+27.590	-52.845			15	+42.621	-20.225			11	+60.021	-3.801			9	-48.774	+44.080		
10	+27.628	-15.790			11	+42.658	-41.719			9	+61.040	-38.301			9	-47.998	+56.723		
10	+27.804	-30.683			9	+42.732	-51.382			11	+61.089	-13.027			9	-47.802	+56.845		
12	+28.295	-20.179			11	+42.816	-5.875			14	+61.426	-44.475	65 1637	9.6	9	-47.550	+45.546		
11	+28.626	-44.209			15	+43.186	-37.532	65 1627	9.7	11	+61.674	-48.789			10	-47.542	+51.108		
	861					921					981				31				
14	+28.724	-49.720	65 1616	9.8	9	+43.481	-31.176			16	+61.837	-59.763	65 1638	9.3	9	-47.290	+62.082		
11	+29.383	-22.683			11	+43.735	-28.027			10	+62.261	-7.358			9	-46.078	+30.668		
11	+29.449	-32.600			15	+44.162	-27.445			10	+62.596	-5.660			9	-45.343	+11.252		
12	+29.466	-39.951			9	+44.280	-46.411			12	+63.359	-16.745			9	-44.927	+19.133	64 1640	9.6
9	+29.594	-34.179			12	+44.642	-34.698			10	+63.500	-22.186			9	-44.890	+62.958		
10	+30.064	-15.080			9	+44.781	-6.041			11	+63.821	-14.361			34	-44.298	+19.035	64 1641	7.8
9	+30.704	-62.926			10	+45.368	-14.570			16	+63.889	-57.224	65 1639	9.3	15	-43.857	+23.753	64 1642	9.3
12	+30.982	-22.355	65 1617	9.9	11	+45.371	-18.624			10	+64.138	-63.605			9	-43.503	+19.798		
9	+31.218	-49.581			31	+45.398	-13.886	65 1628	8.9	11	+64.165	-45.315			9	-43.025	+39.245		
11	+31.243	-13.101			9	+45.450	-39.627			19	+64.257	-50.915	65 1640	9.2	9	-42.386	+54.446		
	871					931					991				41				
10	+31.618	-21.582			18	+46.158	-30.718	65 1629	9.4	9	+64.373	-17.827			15	-42.091	+22.398	64 1643	9.4
13	+31.675	-16.636	65 1618	9.8	12	+46.752	-20.123								9	-41.216	+16.793		
11	+32.477	-24.597			12	+47.516	-57.101								9	-40.985	+36.049		
15	+32.626	-61.206	65 1620	9.4	17	+47.957	-14.177	65 1630	9.6						9	-40.413	+58.358		
16	+32.828	-23.358	65 1619	9.6	9	+48.114	-19.063								9	-40.112	+17.252		
10	+33.075	-39.159			12	+48.524	-52.254								11	-39.394	+44.691		
9	+33.085	-33.215			11	+48.577	-20.684								9	-38.276	+44.488		
11	+33.738	-58.100			10	+48.620	-54.640								9	-37.381	+57.271		
19	+33.852	-11.436	65 1621	9.4	9	+48.724	-10.888								10	-36.552	+49.615		
13	+34.117	-25.025			13	+48.817	-11.674								9	-35.744	+62.080		
	881					941													
10	+34.247	-54.372			24	+49.027	-26.557	65 1632	9.1										
11	+34.681	-6.143			9	+49.060	-36.335												
14	+34.814	-17.198			11	+49.127	-26.495												
12	+35.098	-43.883			10	+49.262	-30.612												
10	+35.294	-8.831			16	+49.337	-15.764	65 1631	9.6										
14	+35.846	-62.493			9	+49.448	-63.412												
26	+36.474	-28.778	65 1623	9.0	11	+49.788	-31.317												
19	+36.553	-13.470	65 1622	9.4	10	+49.998	-23.117												
15	+37.211	-49.209			10	+50.216	-25.190												
9	+37.301	-10.267			9	+50.386	-13.627												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,		64 1644	9.3		111,		64 1649	8.8		171,		64 1658 64 1659	9.7 8.8		231,		64 1665	8.6
9	-35.711	+56.017			9	-3.754	+47.970			9	+27.207	+60.185			9	+56.720	+7.108		
15	-35.127	+8.688			10	-2.994	+21.675			9	+27.501	+60.575			9	+57.489	+20.803		
9	-34.151	+58.451			9	-0.655	+9.291			11	+27.920	+29.682			9	+57.790	+11.079		
11	-34.099	+45.834			26	0.188	+30.079			23	+27.956	+12.154			9	+57.824	+32.826		
9	-33.145	+22.684	9	+0.119	+39.937	9	+28.040	+58.648	10	+58.194	+3.569								
9	-33.105	+21.650	63 1881	6.8	50	+0.622	+58.349	64 1650	9.0	9	+28.227	+54.374	64 1660	9.7	9	+58.494	+4.325	64 1666	9.3
9	-32.771	+57.112			9	+1.258	+52.029			9	+29.199	+45.752			9	+58.566	+13.355		
9	-32.468	+18.450			9	+1.893	+37.187			9	+29.224	+59.886			9	+58.623	+3.500		
9	-32.194	+60.308			9	+1.900	+22.772			11	+29.613	+7.919			10	+59.432	+4.263		
9	-31.677	+56.819			16	+2.516	+51.933			9	+30.637	+19.367			22	+59.625	+39.054		
	61		64 1645	9.7		121		64 1651 64 1652	9.7 9.6		181		63 1889	9.0		241		65 1632	9.1
9	-31.507	+61.552			9	+3.476	+33.487			9	+30.983	+48.640			10	+59.725	+41.435		
9	-30.870	+52.331			9	+3.498	+2.412			9	+31.645	+44.712			9	+59.772	+3.185		
9	-30.406	+6.117			11	+5.099	+16.910			9	+31.731	+41.690			12	+59.865	+11.883		
9	-29.698	+47.462			11	+5.527	+17.788			9	+31.747	+23.360			9	+60.262	+5.232		
9	-29.491	+17.003	9	+6.142	+54.027	9	+32.709	+29.179	9	+60.276	+24.459								
9	-28.881	+37.783	63 1866	9.7	9	+6.262	+13.971	64 1653	9.4	11	+33.383	+17.269	64 1661	9.3	9	+60.378	+19.075	65 1633	8.8
9	-28.740	+58.991			9	+6.811	+53.856			9	+33.426	+40.564			9	+60.838	+17.432		
12	-27.909	+64.718			9	+7.594	+9.189			15	+33.444	+50.820			9	+61.034	+21.088		
9	-27.514	+50.957			15	+7.666	+22.489			9	+34.213	+14.256			9	+61.439	+18.319		
11	-27.401	+42.762			9	+7.738	+56.833			9	+34.323	+19.261			9	+61.509	+10.863		
	71		64 1646	9.7		131		64 1654	8.9		191		64 1662 64 1663	9.4 9.0		251		65 1634	9.5
9	-27.389	+44.216			9	+7.749	+29.254			10	+34.500	+42.539			16	+61.728	+18.137		
9	-26.960	+34.557			9	+9.050	+34.076			9	+35.378	+47.198			9	+61.991	+31.656		
9	-26.832	+62.246			9	+9.195	+36.783			9	+35.535	+9.375			9	+62.114	+17.862		
9	-26.705	+39.433			10	+9.550	+62.905			17	+35.668	+57.483			11	+62.157	+19.460		
9	-26.514	+44.893	9	+10.872	+37.578	11	+36.922	+6.943	9	+63.524	+39.514								
13	-26.342	+46.189	64 1647	9.7	9	+11.026	+28.691	64 1655	9.6	9	+37.083	+43.847	64 1662 64 1663	9.4 9.0	16	-64.554	-27.142	65 1637	9.6
9	-26.199	+58.167			9	+11.822	+1.528			9	+37.645	+31.373			9	-63.936	-57.702		
10	-25.564	+26.102			9	+12.224	+44.093			9	+39.654	+16.936			9	-63.840	-23.645		
9	-25.428	+54.927			9	+12.721	+53.868			9	+39.792	+60.829			9	-63.467	-31.835		
9	-24.684	+23.396			9	+12.896	+39.523			16	+40.474	+1.763			9	-63.270	-52.804		
	81		63 1869	9.5		141		64 1656	9.6		201		64 1662 64 1663	9.4 9.0		261		65 1635	9.2
11	-23.216	+47.419			9	+12.953	+23.629			11	+40.484	+10.112			9	-63.122	-21.096		
14	-22.907	+59.239			9	+13.124	+1.014			12	+40.640	+13.084			9	-62.864	-28.305		
9	-22.865	+42.838			9	+13.127	+41.451			9	+41.011	+9.507			10	-62.860	-6.505		
9	-22.837	+23.878			9	+13.244	+0.206			11	+41.735	+55.356			9	-62.803	-30.661		
10	-22.761	+0.371	9	+13.768	+22.300	9	+42.646	+17.841	9	-61.829	-3.480								
9	-21.710	+29.762	64 1648	9.0	9	+13.804	+61.073	64 1657	5.5	9	+43.638	+14.938	64 1662 64 1663	9.4 9.0	9	-61.394	-48.678	65 1636	9.6
9	-21.444	+37.937			9	+14.259	+43.919			9	+44.538	+3.759			9	-61.293	-30.965		
9	-21.194	+34.578			9	+14.794	+21.517			9	+44.549	+1.561			9	-60.341	-32.569		
10	-20.864	+34.439			10	+14.919	+42.613			9	+46.172	+34.574			9	-60.159	-30.215		
10	-20.421	+53.035			9	+15.491	+11.652			9	+46.509	+18.447			20	-59.470	-37.194		
	91		64 1649	9.7		151		64 1658	8.8		211		64 1662 64 1663	9.4 9.0		271		65 1637	9.6
9	-20.108	+58.291			9	+15.518	+43.955			9	+46.811	+16.467			9	-59.073	-50.334		
10	-18.471	+11.533			9	+15.912	+44.090			9	+46.968	+23.006			9	-58.719	-14.230		
10	-18.089	+56.339			18	+16.197	+37.660			9	+48.563	+1.429			14	-57.814	-20.987		
9	-17.042	+47.177			9	+16.472	+41.761			10	+48.806	+14.725			16	-57.078	-10.106		
9	-16.736	+22.834	9	+17.344	+24.161	9	+49.165	+64.451	14	-56.896	-3.095								
9	-16.105	+5.716	64 1650	9.6	9	+17.450	+43.629	64 1659	9.6	13	+50.753	+2.129	64 1662 64 1663	9.4 9.0	9	-56.677	-2.565	65 1638	9.7
9	-14.505	+42.082			9	+17.662	+18.876			10	+51.008	+19.310			9	-55.171	-3.676		
9	-14.355	+54.599			14	+19.457	+33.526			9	+51.023	+6.463			9	-54.815	-56.749		
9	-14.064	+59.599			10	+19.836	+27.597			9	+51.246	+47.749			9	-54.697	-59.095		
9	-13.997	+9.274			9	+21.426	+29.166			9	+51.288	+9.808			14	-53.611	-55.478		
	101		64 1651	9.7		161		64 1660	9.6		221		64 1662 64 1663	9.4 9.0		281		65 1639	9.7
9	-12.504	+8.067			9	+21.687	+8.797			9	+51.392	+16.006			9	-53.475	-12.790		
9	-10.421	+51.863			9	+21.849	+3.064			16	+52.024	+45.375			10	-52.838	-52.954		
9	-9.846	+62.762			10	+23.112	+15.852			19	+52.094	+25.503			9	-52.699	-7.074		
9	-9.754	+56.342			9	+23.123	+47.071			9	+52.374	+34.540			9	-52.495	-5.347		
9	-8.316	+5.949	9	+23.444	+25.801	9	+52.508	+43.321	9	-51.748	-38.015								
9	-7.807	+24.497	64 1652	9.6	14	+24.139	+50.518	64 1661	9.6	9	+52.748	+24.331	64 1662 64 1663	9.4 9.0	14	-50.946	-44.145	65 1640	9.8
9	-6.484	+13.898			9	+24.306	+25.762			9	+53.832	+2.922			10	-50.938	-16.354		
9	-6.117	+48.199			9	+25.083	+16.423			9	+55.048	+5.148			9	-50.645	-13.898		
9	-5.113	+46.797			68	+26.426	+35.678			11	+55.294	+8.581			9	-50.421	-21.776		
26	-4.568	+0.162			9	+27.205	+39.496			9	+56.705	+28.936			10	-50.400	-48.418		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
9	-49°868	-17°606			10	-28°511	-51°716			9	-0°430	-44°369			9	+30°560	-15°850		
15	-49°464	-59°372	65 1638	9°3	14	-27°922	-37°999			9	+0°262	-54°456			9	+31°191	-57°679		
9	-48°912	-8°405			10	-27°691	-49°401			13	+0°335	-60°888	65 1654	9°6	9	+31°256	-42°738		
15	-48°491	-5°996	64 1639	9°3	9	-27°640	-43°163			9	+2°353	-25°932			9	+31°342	-43°342		
9	-48°455	-18°520			9	-26°314	-21°028			9	+2°478	-58°669			9	+31°595	-46°667		
11	-48°166	-44°795			9	-25°825	-37°591			15	+3°195	-29°534	65 1655	9°3	9	+34°885	-4°853		
9	-48°021	-16°054			9	-25°422	-62°084			11	+3°856	-34°987			10	+34°963	-27°912		
9	-47°966	-19°174			10	-25°006	-44°018			10	+5°784	-52°081			9	+35°546	-19°201		
9	-47°772	-6°723			14	-24°200	-33°843	65 1648	9°7	9	+7°151	-25°616			14	+36°913	-44°040		
16	-47°671	-50°361	65 1640	9°2	10	-23°847	-7°885			13	+7°327	-57°309			9	+37°039	-52°310		
	301					361					421					481			
15	-47°616	-56°689	65 1639	9°3	9	-23°280	-16°185			10	+7°774	-42°098			9	+37°706	-28°750		
10	-46°907	-63°021			23	-23°097	-58°933	65 1649	8°8	9	+7°898	-5°901			10	+37°780	-28°791		
9	-46°756	-16°723			9	-22°243	-59°803			9	+8°172	-0°712			9	+37°863	-17°921		
9	-46°602	-16°699			9	-21°623	-58°349			12	+9°199	-23°731			10	+38°282	-6°633		
9	-46°541	-48°283			11	-21°339	-5°128			9	+11°133	-25°914			16	+38°464	-60°537	65 1664	9°2
17	-46°277	-55°981	65 1641	9°0	14	-21°002	-56°941	65 1650	9°7	17	+11°873	-25°902	65 1656	8°9	9	+38°949	-25°608		
9	-46°027	-30°007			10	-20°671	-0°924			9	+12°200	-56°819			9	+38°989	-5°403		
12	-44°312	-33°443			10	-20°460	-42°142			9	+12°734	-34°293			9	+39°154	-38°357		
9	-43°412	-19°289			9	-20°444	-36°607			9	+13°541	-2°351			9	+39°749	-39°757		
9	-43°311	-43°226			10	-20°261	-23°287			9	+13°611	-45°755			9	+40°158	-50°784		
	311					371					431					491			
9	-42°804	-9°161			14	-20°006	-17°343	65 1651	9°3	9	+14°139	-56°879			9	+40°336	-56°826		
11	-42°754	-43°231			12	-19°305	-45°330			9	+14°558	-19°264			11	+41°853	-32°410		
10	-42°426	-40°598			9	-18°997	-45°122			9	+15°423	-52°003			9	+42°076	-3°220		
9	-42°112	-14°884			9	-18°916	-35°722			13	+15°541	-33°083			9	+42°117	-59°088		
11	-41°366	-50°777			9	-17°366	-36°096			9	+15°843	-9°949			9	+43°237	-40°640		
15	-41°142	-11°568	65 1644	9°5	11	-16°668	-5°272			13	+16°150	-3°367			9	+43°256	-35°879		
9	-41°076	-56°492			15	-15°866	-53°824	65 1652	9°6	9	+16°790	-24°387			9	+43°294	-36°405		
9	-40°963	-7°059			13	-15°837	-48°000			15	+17°186	-53°052	65 1657	9°4	9	+44°019	-58°208		
9	-39°827	-41°274			11	-15°481	-29°661			9	+17°222	-23°363			9	+44°664	-49°178		
11	-39°469	-53°229			9	-15°392	-53°812			9	+17°955	-25°195			10	+44°771	-45°194		
	321					381					441					501			
10	-39°135	-56°770			9	-15°388	-55°920			9	+17°981	-17°824			14	+45°026	-0°380		
11	-37°420	-0°990			10	-14°801	-29°247			10	+18°825	-35°292			9	+45°556	-13°415		
9	-37°363	-25°162			9	-14°661	-15°047			14	+19°193	-15°530	65 1658	9°7	9	+46°151	-17°810		
9	-36°778	-9°945			9	-13°740	-28°548			9	+19°513	-17°420			14	+46°694	-43°161	65 1665	9°7
9	-35°713	-29°544			14	-13°191	-51°136	65 1653	9°5	15	+19°555	-11°776	65 1659	9°4	9	+46°843	-52°059		
10	-34°631	-28°799			10	-11°921	-35°107			10	+19°610	-41°031			10	+46°946	-19°408		
9	-34°482	-3°426			9	-11°140	-8°184			15	+20°373	-35°565	65 1660	9°5	9	+47°445	-16°552		
9	-34°452	-17°753			10	-10°283	-50°269			9	+20°612	-61°998			9	+47°631	-6°970		
10	-34°405	-16°278			9	-8°549	-4°786			9	+20°969	-4°480			9	+48°169	-8°847		
9	-34°209	-31°445			9	-8°465	-56°536			16	+21°740	-59°670	65 1661	9°0	9	+48°996	-13°592		
	331					391					451					511			
10	-34°188	-37°359			9	-8°419	-55°964			10	+22°588	-13°052			10	+49°030	-56°336		
9	-34°119	-47°811			9	-8°366	-47°951			9	+23°704	-64°617			9	+49°300	-13°692		
9	-34°103	-36°771			9	-6°399	-31°887			9	+23°703	-4°382			14	+49°923	-1°511		
13	-33°671	-62°420			9	-6°005	-9°018			11	+24°434	-49°139			9	+50°299	-39°309		
9	-33°612	-62°559	65 1645	9°7	9	-5°737	-18°126			9	+24°612	-50°367			9	+50°376	-51°343		
9	-33°472	-5°388			10	-5°453	-51°947			12	+24°814	-61°666			9	+51°930	-4°653		
12	-33°451	-18°885			9	-4°319	-33°973			9	+26°431	-24°548			15	+51°968	-61°352	65 1667	9°4
9	-32°964	-3°380			10	-4°234	-54°780			9	+26°707	-9°803			15	+51°984	-33°535	65 1666	9°7
10	-32°082	-26°139			9	-4°197	-11°710			9	+27°236	-62°467			9	+52°607	-40°351		
14	-31°380	-46°151			9	-4°107	-11°292			15	+27°427	-49°759	65 1663	9°5	9	+52°738	-33°682		
	341					401					461					521			
10	-30°742	-35°907			9	-3°857	-12°868			26	+27°593	-17°720	65 1662	8°3	9	+52°806	-46°478		
25	-30°440	-21°408	65 1646	8°5	9	-3°843	-34°893			14	+27°711	-38°435			9	+52°814	-45°517		
9	-30°290	-58°707			9	-3°163	-16°725			9	+27°741	-9°112			9	+52°905	-22°296		
9	-30°227	-35°129			10	-3°162	-58°597			9	+28°762	-18°727			10	+53°028	-54°729		
12	-30°150	-8°956			9	-1°976	-38°173			9	+28°803	-37°847			13	+53°248	-2°923		
9	-29°940	-33°516			10	-1°941	-29°863			9	+29°425	-18°495			9	+53°346	-4°468		
9	-29°567	-34°829			9	-1°198	-24°037			9	+29°600	-57°516			11	+53°383	-22°548		
9	-29°461	-13°418			12	-1°146	-16°089			9	+29°633	-61°964			14	+53°752	-52°121		
11	-29°112	-40°905			9	-1°049	-12°337			9	+29°755	-40°197			16	+53°926	-8°639	64 1664	9°3
18	-28°662	-44°374	65 1447	9°0	9	-0°947	-9°213			12	+30°257	-4°850			10	+53°933	-60°449		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	531,																				
30	+53° 971	-39° 871	65 1668	7.7	PLATE CENTRE. 11^h 33^m, - 65° Plate 3912. 1915, May 6. PROVISIONAL CONSTANTS. $a = -0.01152$ $d = -0.00058$ $b = +0.00060$ $e = -0.01153$ $c = +0.1280$ $f = -0.0690$ To obtain standard co-ordinates, $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																
9	+54° 121	-30° 846																			
9	+54° 357	-10° 403																			
9	+54° 422	-47° 483																			
9	+55° 129	-34° 710																			
9	+55° 721	-42° 073																			
32	+56° 069	-58° 125	65 1669	7.9																	
9	+56° 088	-26° 144																			
9	+56° 173	-12° 143																			
9	+56° 264	-46° 353																			
	541																				
9	+56° 912	-33° 562			18	-64° 985	+1° 812			12	-38° 007	+20° 125			12	-13° 780	+27° 053				
9	+57° 042	-18° 289			10	-61° 954	+2° 818			11	-37° 854	+34° 166			10	-13° 383	+21° 842				
12	+57° 074	-4° 535			9	-61° 140	+32° 868			19	-37° 808	+16° 641	64 1669	9.2	10	-13° 357	+4° 294				
9	+57° 466	-22° 309			11	-60° 976	+28° 983			29	-37° 724	+8° 668	64 1668	8.3	12	-13° 147	+3° 568				
9	+57° 781	-14° 535			15	-60° 914	+8° 566			10	-36° 799	+18° 335			9	-12° 138	+36° 125				
9	+57° 904	-18° 825			10	-60° 910	+5° 133			9	-36° 640	+17° 493			10	-12° 026	+48° 690				
10	+59° 092	-16° 079			9	-59° 392	+7° 206			10	-36° 024	+12° 806			10	-11° 750	+52° 425				
14	+59° 203	-47° 491	65 1670	9.6	11	-58° 890	+41° 676			9	-35° 967	+18° 339			12	-11° 092	+2° 114				
9	+59° 505	-51° 077			38	-58° 808	+39° 283	64 1665	8.6	9	-35° 771	+5° 595			9	-11° 026	+27° 920				
9	+59° 562	-3° 972			11	-58° 619	+11° 246			10	-35° 493	+4° 395			11	-10° 976	+58° 132				
	551				11					13			64 1671	9.7	9						
11	+59° 883	-2° 799			11	-57° 999	+13° 576			16	-34° 471	+30° 663	64 1672	9.7	12	-9° 651	+57° 517				
9	+61° 039	-61° 236			13	-57° 665	+3° 792			12	-34° 455	+7° 709			13	-8° 757	+35° 345				
9	+61° 250	-9° 029			9	-57° 216	+3° 742			13	-33° 729	+37° 275			11	-8° 456	+32° 830				
9	+61° 345	-59° 831			15	-56° 611	+12° 206			12	-33° 432	+34° 711			12	-8° 422	+5° 023				
10	+62° 012	-35° 470	65 1671	9.2	12	-56° 471	+4° 570			10	-32° 658	+17° 279			11	-8° 068	+32° 747				
13	+62° 293	-52° 401	65 1672	9.7	9	-56° 076	+3° 514			18	-32° 427	+45° 114	64 1673	9.2	12	-7° 382	+23° 097				
13	+62° 640	-26° 576			9	-56° 013	+17° 799			13	-32° 012	+51° 725			12	-7° 350	+3° 388				
9	+62° 703	-49° 117			11	-55° 916	+32° 081			11	-31° 556	+41° 256			9	-7° 330	+47° 516				
10	+62° 749	-37° 077			11	-55° 722	+5° 593			11	-31° 262	+30° 823			11	-6° 199	+2° 700				
10	+63° 052	-0° 423			11	-55° 484	+18° 730			81					141						
	561				20	-55° 182	+18° 572	64 1666	9.3	10	-31° 099	+19° 156			9	-5° 720	+27° 718				
9	+63° 176	-31° 107			10	-54° 886	+11° 302			10	-30° 539	+31° 957			10	-5° 427	+61° 864				
9	+63° 236	-7° 958			13	-54° 853	+19° 919			12	-29° 403	+51° 497			11	-5° 375	+42° 395				
9	+63° 516	-47° 341			11	-54° 794	+18° 329			10	-28° 510	+53° 566			15	-5° 300	+37° 595	64 1679	9.6		
13	+63° 554	-42° 023			9	-53° 570	+41° 745			9	-27° 962	+13° 263			10	-5° 274	+37° 654				
					11	-52° 531	+0° 152			10	-27° 758	+9° 078			10	-5° 073	+50° 821				
					11	-52° 267	+26° 932			9	-26° 766	+16° 871			11	-5° 039	+47° 766				
					9	-51° 528	+9° 615			10	-26° 149	+11° 596			9	-4° 730	+24° 117				
					9	-51° 329	+31° 713			12	-25° 894	+26° 104			11	-4° 686	+30° 434				
					9	-50° 633	+31° 114			11	-25° 864	+46° 382			11	-4° 332	+42° 896				
					31					91					151						
					10	-50° 341	+12° 722			10	-24° 538	+10° 775			10	-4° 078	+28° 341				
					9	-50° 059	+7° 858			10	-24° 348	+20° 025			9	-4° 015	+6° 907				
					10	-49° 825	+16° 271			10	-23° 981	+20° 608			10	-3° 958	+17° 179				
					9	-49° 060	+0° 615			9	-23° 975	+43° 336			11	-3° 802	+52° 878				
					12	-49° 017	+37° 045			15	-23° 790	+23° 928			11	-3° 475	+38° 742				
					11	-48° 473	+11° 342			20	-23° 634	+26° 946	64 1675	9.4	10	-2° 957	+62° 604				
					9	-48° 412	+34° 786			11	-23° 527	+11° 259			21	-2° 247	+30° 547	64 1680	9.0		
					11	-48° 148	+23° 872			19	-23° 026	+3° 800	64 1676	9.4	12	-2° 186	+13° 153				
					12	-47° 321	+5° 137			10	-23° 028	+25° 494			11	-1° 486	+28° 858				
					12	-47° 298	+45° 368			10	-22° 041	+12° 809			9	-1° 463	+25° 459				
					41					101					161						
					10	-46° 752	+33° 964			44	-21° 541	+8° 587	64 1677	7.4	19	-1° 407	+4° 387	64 1681	9.6		
					16	-46° 422	+31° 798	64 1667	9.6	11	-20° 418	+11° 499			13	-0° 989	+25° 967				
					9	-46° 302	+41° 995			10	-20° 305	+28° 974			10	-0° 760	+17° 812				
					9	-46° 259	+11° 356			12	-20° 216	+50° 235			15	-0° 606	+51° 523				
					11	-46° 156	+24° 950			10	-20° 078	+10° 856			12	+0° 372	+40° 692				
					12	-46° 018	+1° 166			10	-19° 645	+36° 079			14	+1° 004	+60° 331	63 1933	9.7		
					9	-45° 837	+38° 239			11	-19° 518	+43° 420			9	+1° 074	+48° 204				
					11	-44° 868	+3° 995			11	-19° 159	+30° 143			9	+1° 123	+44° 534				
					11	-44° 735	+13° 369			9	-19° 005	+34° 081			16	+1° 294	+60° 894	63 1934	9.3		
					11	-44° 625	+11° 660			10	-18° 833	+6° 171			11	+1° 324	+3° 797				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
10	+ 1°520	+60°495			13	+15°546	+30°214			11	+29°671	+58°528			11	+42°038	+46°433		
10	+ 1°966	+43°048			12	+16°701	+26°772			13	+30°379	+17°617			9	+42°260	+17°225		
11	+ 2°080	+ 8°045			13	+17°288	+22°028			9	+30°489	+25°241			14	+42°425	+23°473		
9	+ 3°764	+61°282			11	+17°315	+29°487			9	+30°558	+29°619			20	+42°566	+ 2°717		
10	+ 3°838	+59°073			10	+17°356	+36°754			11	+30°685	+15°056			12	+42°636	+41°014		
13	+ 4°307	+ 9°441			9	+17°449	+30°320			9	+31°030	+25°213			10	+42°670	+43°702		
11	+ 4°469	+38°742			9	+18°096	+13°892			10	+31°352	+30°034			15	+42°717	+16°623		
19	+ 4°621	+38°997	64 1683	9.4	12	+18°325	+26°317			9	+31°391	+49°492			13	+43°983	+58°886	63 1950	9.9
11	+ 4°743	+40°856			14	+18°337	+30°502			18	+31°687	+46°860	64 1689	9.6	9	+44°024	+42°824		
10	+ 5°240	+63°367			11	+18°356	+50°862			9	+31°699	+42°501			10	+44°195	+40°472		
	181					241					301					361			
11	+ 5°378	+28°193			11	+18°394	+21°065			9	+31°712	+31°779			15	+44°305	+22°707		
11	+ 5°916	+ 9°843			10	+18°447	+11°246			10	+31°804	+63°417			11	+44°415	+31°506		
16	+ 6°073	+45°962	64 1684	9.7	11	+18°545	+28°905			9	+31°837	+42°618			11	+44°947	+25°749		
10	+ 6°375	+17°795			12	+18°593	+28°907			11	+31°912	+32°860			9	+45°117	+23°770		
11	+ 6°432	+25°401			9	+18°706	+19°892			11	+32°115	+46°266			10	+45°204	+30°113		
11	+ 6°436	+64°983			11	+18°948	+24°827			10	+32°388	+24°355			10	+45°410	+13°894		
16	+ 6°700	+62°753			9	+19°065	+34°907			9	+32°492	+54°628			10	+45°475	+49°001		
10	+ 6°807	+19°858			12	+19°270	+27°237			10	+32°529	+17°611			9	+45°697	+32°470		
9	+ 7°028	+48°865			11	+19°385	+ 6°092			9	+32°555	+24°293			11	+46°662	+ 8°450		
13	+ 7°249	+36°262	63 1936	9.4	9	+19°445	+19°298			16	+32°650	+11°409			24	+46°819	+48°278	64 1698	9.1
	191					251					311					371			
12	+ 7°825	+35°651			11	+19°517	+34°690			15	+32°995	+19°435			9	+47°096	+ 8°251		
12	+ 7°971	+43°695			15	+19°800	+19°256			9	+33°025	+47°884			9	+47°418	+ 1°064		
9	+ 8°422	+ 3°252			12	+20°847	+ 4°600			11	+33°103	+19°194			12	+47°468	+28°879		
9	+ 8°546	+29°131			9	+20°857	+21°334			10	+33°150	+ 9°029			10	+47°511	+30°133		
9	+ 8°549	+48°580			12	+20°995	+13°776			9	+33°358	+ 3°646			10	+47°942	+ 1°531		
10	+ 8°931	+44°893			13	+21°031	+56°957			14	+33°791	+39°556			12	+48°023	+31°648	64 1699	9.9
10	+ 9°104	+57°956			9	+21°033	+61°382			15	+34°148	+52°238	63 1948	9.7	12	+48°299	+43°221		
11	+ 9°310	+34°740			9	+21°128	+25°845			11	+34°584	+ 1°513			18	+48°500	+11°870	64 1700	9.5
16	+ 9°333	+57°314			9	+21°406	+19°721			22	+85°117	+10°885	64 1690	9.2	10	+48°916	+48°865		
9	+ 9°342	+32°255			10	+21°713	+43°724			11	+35°939	+38°902			10	+49°186	+61°263		
	201					261					321					381			
9	+ 9°462	+32°172			9	+21°775	+54°184			10	+36°185	+15°488			10	+49°953	+ 7°999		
9	+ 9°480	+27°957			10	+21°968	+22°195			12	+36°212	+32°438			9	+50°472	+57°256		
13	+ 9°520	+32°384			9	+21°963	+61°043			11	+36°551	+44°588			9	+50°600	+11°157		
9	+ 9°966	+27°675			10	+22°179	+ 3°350			9	+36°572	+42°170			12	+50°718	+35°728	64 1701	9.9
12	+10°133	+47°701			14	+22°245	+38°874			11	+36°607	+36°762			11	+51°047	+43°811		
11	+10°171	+60°495			9	+22°579	+48°722			22	+36°704	+49°231	64 1691	9.1	13	+51°330	+ 5°189	64 1703	9.9
11	+10°432	+35°574			13	+22°632	+52°216			10	+37°086	+50°990			13	+51°602	+36°544	64 1702	9.9
11	+10°494	+25°101			9	+22°645	+ 9°277			12	+37°137	+26°129			11	+51°694	+31°744		
9	+10°698	+26°434			11	+22°982	+ 8°505			12	+37°353	+44°004			12	+51°952	+29°909		
10	+10°787	+44°846			9	+23°548	+56°286			9	+37°460	+36°222			10	+52°115	+57°946		
	211					271					331					391			
10	+11°192	+25°974			9	+23°694	+26°632			12	+37°873	+40°178			13	+52°289	+59°527		
9	+11°298	+30°228			11	+24°386	+17°921			19	+38°028	+21°893	64 1693	9.2	16	+52°444	+38°388	64 1704	9.4
14	+11°365	+22°917			15	+24°494	+37°128			9	+38°084	+37°279			9	+52°465	+ 6°003		
12	+11°433	+48°777			12	+24°563	+25°555			10	+38°301	+21°641			10	+52°496	+46°057		
10	+11°685	+46°991			15	+24°923	+44°190	64 1688	9.6	20	+38°806	+20°509	64 1694	9.6	11	+52°748	+11°232		
10	+11°823	+ 6°330			13	+24°938	+29°783			16	+38°918	+10°620			9	+52°852	+45°169		
61	+11°838	+ 9°518	64 1685	6.4	10	+25°673	+43°074			10	+39°021	+42°283			10	+52°942	+ 7°922		
12	+13°033	+25°854			10	+26°012	+20°445			10	+39°297	+10°757			9	+53°081	+ 5°801		
12	+13°084	+15°465			10	+26°195	+21°897			18	+39°372	+22°197			10	+53°211	+61°059		
9	+13°119	+47°050			10	+26°818	+10°198			17	+39°822	+39°964	64 1695	9.4	11	+53°398	+24°551		
	221					281					341					401			
9	+13°944	+27°719			12	+27°121	+47°570			12	+39°878	+47°600			9	+54°206	+50°441		
22	+13°957	+51°777	64 1686	8.8	10	+27°535	+45°930			10	+39°945	+15°962			10	+54°436	+40°449		
10	+14°029	+62°968			13	+27°878	+63°093			9	+40°200	+38°435			14	+54°677	+52°494	63 1957	9.7
11	+14°081	+ 1°914			10	+27°980	+58°479			12	+40°419	+37°107			10	+54°906	+23°747		
10	+14°431	+42°643			10	+28°130	+37°618			10	+40°430	+17°555			11	+55°489	+18°492		
12	+14°484	+11°360			9	+28°293	+32°621			9	+40°483	+62°043			12	+55°692	+19°550		
10	+14°892	+59°466			12	+28°765	+38°497			16	+40°581	+44°920	64 1696	9.6	11	+55°793	+55°414		
12	+14°945	+44°794			9	+28°863	+53°314			15	+40°591	+17°811			9	+55°992	+ 1°939		
26	+15°362	+16°560	64 1687	8.8	13	+29°228	+30°111			12	+40°613	+60°767			9	+56°101	+47°783		
12	+15°546	+24°302			11	+29°425	+40°811			19	+40°976	+17°386	64 1697	9.3	10	+56°112	+22°732		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,					531,					591,			
12	+56.400	+ 2.280			10	-49.928	-59.194			9	-36.339	-63.674			19	-22.297	-35.713	65 1683	9.2
11	+57.455	+22.149			11	-49.743	- 0.263			12	-35.944	-55.598			16	-22.256	-41.130		
9	+57.568	+13.463			14	-49.541	-51.744	65 1672	9.7	28	-35.890	-52.269	65 1676	8.7	10	-21.618	-14.754		
13	+57.789	+22.797	64 1707	9.9	9	-49.483	-12.349			12	-35.814	-49.435			10	-21.496	-47.146		
50	+58.014	+47.020	64 1706	7.2	10	-49.353	-48.443			11	-35.561	-45.511			10	-21.433	-34.175		
11	+58.175	+ 6.234			12	-49.029	-41.307			18	-35.556	-35.082	65 1677	9.5	9	-21.120	-32.661		
10	+58.238	+ 7.266			10	-48.698	-46.612			9	-35.243	-10.718			10	-20.886	-30.717		
10	+58.482	+48.112			11	-48.554	- 8.981			10	-35.112	-22.107			10	-20.886	- 0.141		
12	+58.618	+26.745			9	-47.295	-31.385			12	-35.052	-52.840			16	-20.645	-55.725	65 1684	9.6
14	+58.740	+ 9.823			11	-47.188	-15.452			18	-34.994	-32.963	65 1678	9.7	11	-20.344	-50.615		
	421					481					541					601			
11	+58.920	+ 5.218			10	-47.181	-43.439			9	-34.738	-45.923			9	-20.244	-31.415		
10	+59.361	+13.825			9	-47.100	-37.581			12	-34.450	- 6.761			11	-19.945	-30.477		
16	+59.954	+ 4.984	64 1708	9.4	9	-46.690	-20.421			12	-33.732	-30.649			9	-19.566	-28.511		
10	+60.917	+55.081			9	-46.681	-18.073			10	-33.719	- 8.556			12	-19.376	-57.784		
10	+61.526	+14.384			10	-46.338	-51.111			10	-33.683	-27.426			10	-19.254	-52.392		
12	+61.980	+13.832			9	-45.934	- 0.787			14	-33.601	- 3.300			11	-19.168	-28.241		
11	+62.400	+21.603			12	-45.734	-10.439			11	-33.515	-14.686			10	-18.830	-21.863		
12	+62.576	+ 9.492			9	-45.620	-12.554			9	-33.245	-28.980			10	-18.796	- 5.574		
13	+62.616	+60.722	63 1968	9.6	15	-45.432	-27.480			10	-32.813	-43.325			16	-18.420	-30.868	65 1685	9.7
11	+62.784	+ 6.392			15	-45.395	- 62.721	65 1673	9.4	9	-31.990	-42.831			12	-17.940	-43.964		
	431					491					551					611			
10	+62.978	+ 4.501			15	-45.201	-53.217	65 1674	9.7	9	-31.198	-23.079			10	-17.897	-38.111		
14	+63.251	+11.497	64 1710	9.9	10	-44.493	-50.871			9	-30.959	-33.221			9	-17.725	-41.430		
16	+63.299	+39.723	64 1709	9.4	12	-44.397	- 2.523			21	-30.437	- 4.448	64 1674	9.2	9	-17.712	- 3.747		
9	+63.651	+13.475			11	-44.181	-23.065			34	-30.419	-19.135	65 1680	7.8	9	-17.593	-17.487		
9	+64.077	+29.231			11	-43.787	-48.524			11	-30.230	-36.865			14	-17.391	-11.783		
11	+64.381	+33.845			10	-43.552	-27.912			10	-30.105	-22.797			10	-17.297	-27.419		
9	-63.300	- 4.872			11	-43.470	-17.049			10	-29.182	-29.196			12	-17.177	-32.480		
10	-62.483	-56.646			11	-43.465	-14.032			11	-29.035	-11.115			11	-17.069	-36.353		
10	-62.436	-39.564			10	-43.432	-15.892			12	-28.602	-17.749			10	-16.991	-27.489		
13	-62.123	- 3.051			9	-43.100	- 0.638			11	-28.501	-37.498			9	-16.938	- 3.617		
	441					501					561					621			
9	-61.905	- 4.568			9	-42.200	-16.800			13	-28.448	-17.287			9	-16.632	-35.629		
9	-61.450	-51.562			10	-42.013	-20.329			11	-28.048	-42.507			9	-16.180	-41.780		
14	-61.171	-33.681	65 1666	9.7	9	-41.914	-39.244			12	-28.010	-60.711			11	-16.023	-32.974		
9	-61.063	-22.399			13	-41.591	-29.204			10	-27.835	-38.321			13	-16.008	-17.392		
20	-61.040	- 8.699	64 1664	9.3	9	-41.243	-36.884			12	-27.481	-38.121			11	-15.995	-42.904		
12	-60.578	-22.623			12	-40.845	-41.321			9	-27.308	-43.925			10	-15.977	-49.412		
9	-59.251	-30.841			9	-40.754	-41.742			10	-27.293	-36.227			9	-15.973	-13.991		
14	-59.233	-61.397	65 1667	9.4	10	-40.526	-42.959			9	-27.074	-61.334			10	-15.942	-21.349		
40	-58.755	-39.864	65 1668	7.7	13	-40.391	- 2.655			15	-26.546	-17.175			10	-15.731	-34.454		
12	-58.634	-54.731			10	-40.395	- 2.122			12	-26.438	-27.758			10	-15.609	-27.763		
	451					511					571					631			
10	-58.543	-12.032			11	-40.222	-26.076			10	-26.433	-27.386			12	-15.560	-24.636		
12	-58.179	- 4.372			34	-40.104	-12.022	65 1675	8.6	12	-25.997	-16.431			16	-15.458	-47.980		
14	-58.076	-52.088			9	-39.770	-37.314			14	-25.972	-53.195			9	-15.435	-11.115		
10	-57.598	-26.017			9	-39.699	-45.917			16	-25.674	-33.949			10	-15.305	-11.003		
10	-57.268	-60.371			11	-39.370	- 7.151			10	-25.652	-12.209			17	-15.212	-39.795	65 1686	9.7
10	-56.828	-41.930			13	-39.367	- 5.893			14	-24.755	-29.340			12	-15.012	- 4.909		
9	-56.499	-22.086			11	-39.359	-10.106			10	-24.439	-43.651			16	-14.784	-38.693	65 1687	9.7
9	-55.762	- 3.639			13	-39.149	-47.343			20	-24.346	-43.284	65 1681	9.2	11	-14.693	-29.364		
12	-55.522	- 2.444			10	-39.050	-17.168			9	-24.014	-40.092			11	-14.665	-40.049		
12	-55.344	-15.756			11	-39.045	-62.443			10	-23.856	-51.003			19	-14.519	- 0.764	64 1678	9.5
	461					521					581					641			
42	-55.321	-57.922	65 1669	7.9	12	-38.968	-45.232			9	-23.616	-53.325			9	-14.503	-23.356		
9	-55.118	- 1.545			12	-38.960	-52.782			12	-23.487	-37.088			10	-14.109	-11.367		
9	-53.703	- 8.551			11	-38.896	-38.764			15	-23.436	-42.254			10	-13.227	-55.562		
14	-52.974	-47.102	65 1670	9.6	10	-37.492	-52.332			15	-23.395	-36.843	65 1682	9.6	10	-13.152	-38.295		
10	-51.813	- 7.345			10	-37.354	-50.875			12	-22.960	-25.769			13	-12.766	-47.998		
14	-51.051	-25.973			9	-37.263	-59.044			11	-22.632	-29.294			9	-12.285	-56.538		
20	-51.042	-34.880	65 1671	9.2	11	-37.146	- 1.534			10	-22.622	-33.156			11	-12.063	- 3.620		
12	-50.193	-36.426			12	-37.031	-11.280			11	-22.436	- 8.974			9	-11.961	-42.560		
9	-50.176	-30.449			21	-36.857	- 8.677	64 1670	9.2	9	-22.396	-28.954			11	-11.902	-48.852		
10	-50.140	-60.633			13	-36.669	-53.970			9	-22.366	-63.046			10	-11.154	-19.092		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651,					711,					771,					831,			
9	-10° 904	-30° 395			10	+6° 138	-38° 834			10	+27° 280	-3° 092			9	+49° 343	-1° 607		
11	-10° 755	-22° 795			10	+7° 212	-34° 127			11	+27° 425	-60° 954			10	+50° 214	-5° 201		
12	-10° 732	-52° 244			10	+7° 569	-64° 057			13	+27° 782	-5° 012			9	+50° 829	-30° 458		
13	-10° 225	-40° 853	65 1688	9.7	9	+7° 619	-17° 534			9	+28° 009	-0° 627			11	+51° 355	-34° 890		
11	-10° 184	-41° 008			17	+7° 725	-52° 901	65 1697	9.7	15	+28° 383	-4° 952			10	+51° 450	-10° 085		
26	-9° 992	-32° 599	65 1689	8.5	12	+7° 781	-49° 709			15	+28° 539	-46° 725			10	+51° 863	-23° 350		
11	-9° 764	-8° 828			11	+8° 254	-7° 963			9	+29° 537	-46° 658			12	+51° 950	-7° 993		
9	-9° 628	-8° 823			10	+8° 445	-10° 602			10	+29° 630	-6° 199			10	+53° 085	-13° 141		
15	-9° 539	-55° 669	65 1690	9.7	9	+8° 746	-12° 859			12	+30° 251	-52° 291			9	+53° 203	-39° 655		
10	-9° 125	-18° 000			18	+9° 275	-27° 514	65 1698	9.4	9	+30° 291	-9° 866			11	+53° 377	-3° 886		
	681					721					781					841			
12	-9° 086	-37° 396			10	+9° 437	-27° 586			10	+30° 610	-60° 130			12	+53° 378	-20° 088		
10	-8° 502	-48° 425			10	+9° 809	-60° 325			21	+30° 782	-40° 257	65 1702	9.2	9	+54° 049	-24° 271		
12	-8° 494	-28° 710			9	+9° 859	-63° 468			10	+30° 840	-29° 542			10	+54° 185	-28° 814		
13	-8° 382	-48° 509			10	+10° 140	-14° 009			19	+30° 927	-38° 553	65 1703	9.5	14	+54° 303	-16° 667	65 1710	9.6
15	-7° 998	-29° 218			9	+10° 593	-42° 959			10	+31° 011	-6° 148			13	+54° 404	-36° 294		
10	-7° 589	-15° 948			10	+11° 253	-4° 266			10	+31° 215	-5° 237			12	+54° 408	-4° 375		
11	-7° 391	-56° 984			12	+11° 401	-61° 404			13	+31° 502	-43° 444			14	+54° 659	-37° 819	65 1711	9.9
10	-7° 168	-31° 396			9	+12° 053	-9° 844			11	+31° 606	-7° 150			10	+55° 132	-51° 405		
11	-6° 987	-32° 343			10	+12° 482	-57° 219			11	+31° 671	-29° 550			10	+55° 538	-0° 529		
12	-6° 644	-8° 384			9	+12° 736	-36° 671			10	+32° 270	-21° 689			11	+55° 616	-19° 209		
	671					781					791					851			
12	-6° 412	-26° 061			9	+12° 945	-35° 847			11	+32° 441	-0° 515			9	+55° 642	-34° 634		
22	-5° 721	-39° 072	65 1691	8.8	10	+13° 247	-6° 547			15	+32° 793	-6° 997			23	+55° 734	-2° 955	64 1705	9.0
12	-5° 528	-31° 227			9	+13° 391	-17° 918			11	+32° 932	-18° 656			12	+56° 014	-4° 639		
10	-5° 398	-13° 898			20	+13° 661	-13° 270	65 1699	9.4	12	+33° 136	-21° 074			9	+56° 023	-8° 907		
11	-5° 175	-54° 604			15	+14° 291	-9° 115			10	+33° 466	-16° 504			13	+56° 189	-25° 574		
13	-4° 564	-40° 203	65 1692	9.7	12	+14° 875	-2° 823			11	+33° 695	-16° 590			10	+56° 341	-9° 714		
9	-4° 538	-8° 538			10	+15° 042	-23° 517			10	+34° 493	-29° 702			10	+56° 789	-50° 939		
12	-4° 124	-61° 761			16	+15° 835	-15° 768			10	+34° 911	-34° 622			13	+57° 132	-64° 916	65 1715	9.9
9	-4° 016	-11° 449			11	+15° 870	-32° 723			36	+34° 953	-42° 874	65 1704	8.3	15	+57° 397	-34° 566	65 1713	9.7
18	-3° 804	-22° 539	65 1693	9.6	9	+16° 052	-41° 850			11	+35° 111	-11° 187			12	+57° 689	-29° 744		
	681					741					801					861			
9	-3° 723	-41° 174			10	+16° 256	-56° 573			11	+35° 495	-50° 323			10	+57° 829	-26° 350		
10	-3° 608	-9° 438			10	+16° 258	-32° 873			9	+35° 454	-6° 680			11	+57° 974	-16° 917		
10	-3° 075	-61° 029			9	+16° 510	-17° 954			18	+36° 786	-6° 863	64 1692	9.4	15	+58° 295	-13° 224	65 1714	9.9
20	-2° 857	-15° 046	65 1694	9.2	11	+16° 621	-28° 206			14	+36° 844	-61° 448	65 1705	9.7	10	+58° 390	-5° 795		
16	-2° 586	-55° 791	65 1695	9.6	10	+17° 009	-10° 698			11	+37° 135	-50° 252			10	+58° 423	-6° 164		
12	-2° 496	-42° 666			12	+17° 3.8	-21° 138			10	+37° 309	-15° 532			12	+58° 517	-13° 394		
10	-2° 089	-1° 286			11	+17° 626	-31° 055			12	+37° 329	-7° 461			14	+58° 713	-53° 539	65 1717	9.9
10	-2° 004	-6° 601			11	+18° 091	-12° 570			9	+37° 342	-28° 078			14	+59° 032	-28° 007	65 1716	9.9
14	-1° 782	-22° 255			10	+18° 475	-31° 359			10	+38° 286	-38° 909			11	+59° 099	-26° 504		
11	-1° 778	-36° 900			9	+18° 603	-6° 515			10	+38° 414	-21° 126			10	+59° 583	-25° 782		
	691					751					811					871			
11	-1° 229	-21° 421			10	+18° 756	-34° 601			10	+39° 398	-39° 681			10	+59° 773	-13° 059		
9	-0° 825	-59° 049			14	+18° 972	-60° 254			12	+39° 644	-49° 652			10	+60° 852	-5° 022		
12	-0° 691	-59° 041			10	+19° 148	-49° 645			13	+39° 938	-60° 928			12	+61° 056	-41° 542		
10	+0° 791	-18° 386			10	+19° 182	-19° 442			10	+40° 058	-18° 056			11	+61° 545	-24° 910		
9	+0° 835	-60° 370			12	+20° 267	-28° 580			10	+40° 126	-46° 466			10	+61° 602	-32° 726		
11	+1° 147	-17° 259			16	+20° 853	-55° 154			13	+40° 278	-13° 350			13	+61° 680	-5° 512		
16	+1° 436	-12° 865	65 1696	9.7	11	+21° 533	-23° 746			13	+41° 270	-5° 305			9	+61° 800	-37° 441		
11	+2° 215	-56° 380			9	+22° 053	-38° 161			10	+41° 987	-33° 080			38	+61° 824	-28° 501	65 1719	8.0
10	+2° 313	-40° 116			9	+22° 204	-42° 521			11	+42° 853	-18° 018			13	+61° 902	-20° 217	65 1718	9.9
42	+2° 797	-6° 127	64 1682	7.5	9	+22° 232	-53° 369			9	+43° 741	-33° 154			10	+61° 919	-31° 809		
	701					761					821					881			
11	+3° 135	-46° 380			12	+22° 370	-7° 752			12	+45° 306	-40° 336			10	+62° 094	-6° 745		
9	+3° 169	-44° 292			11	+23° 124	-8° 839			9	+45° 309	-21° 385			10	+62° 214	-0° 818		
9	+3° 935	-21° 407			12	+23° 832	-47° 995			14	+45° 344	-57° 720	65 1706	9.7	13	+62° 835	-10° 885	65 1720	9.9
9	+4° 465	-57° 837			12	+24° 214	-26° 553			10	+45° 346	-44° 284			14	+62° 963	-43° 823	65 1721	9.7
12	+4° 467	-41° 946			10	+24° 894	-49° 665			11	+47° 187	-53° 958			11	+63° 066	-42° 997	65 1722	9.9
9	+4° 550	-18° 107			11	+25° 969	-42° 694			16	+47° 201	-9° 257	65 1707	9.9	11	+63° 323	-14° 114		
9	+4° 571	-63° 792			14	+26° 054	-48° 961			11	+47° 408	-14° 791			10	+63° 436	-27° 734		
11	+4° 648	-8° 497			31	+26° 267	-61° 939	65 1700	8.6	20	+47° 641	-27° 149	65 1708	9.2	10	+63° 739	-4° 802		
11	+4° 704	-17° 277			11	+26° 842	-33° 497			15	+47° 926	-33° 215	65 1709	9.9	9	+64° 304	-7° 554		
9	+5° 865	-3° 472			10	+26° 887	-42° 134			14	+48° 519	-8° 049			13	+64° 411	-35° 268		

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Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
9	+36.718	+55.768			9	-62.764	- 8.356			9	-22.249	-57.459			9	+20.868	- 5.673	64 1761	9.9
9	+36.876	+61.509			9	-60.586	- 4.576			9	-21.579	-38.220			9	+21.926	-49.269		
9	+37.327	+39.299			9	-60.524	-20.298			9	-18.789	- 8.364			9	+24.045	-57.947		
9	+37.474	+50.002			10	-59.855	-16.837	65 1710	9.6	9	-18.105	-29.497			10	+24.244	-28.217		
12	+38.511	+10.418	64 1771	9.4	14	-59.338	- 3.069	64 1705	9.0	9	-17.556	-50.878			10	+24.526	-26.997	65 1765	9.9
23	+39.936	+45.568	64 1772	8.0	9	-58.978	- 4.720			10	-16.578	-24.106	65 1737	9.4	9	+24.548	-14.896		
9	+40.511	+57.882			9	-58.366	-36.401			9	-14.846	-32.245			9	+24.699	-37.340		
9	+40.845	+41.127			9	-58.362	-19.295			11	-14.291	-35.639	65 1738	9.6	9	+24.751	-57.154		
11	+41.481	+36.225	64 1774	0.5	9	-58.026	-37.899	65 1711	9.9	9	-14.108	-63.347	65 1739	9.9	9	+25.219	-56.879		
9	+41.712	+39.341			9	-57.343	-25.590			9	-13.429	-25.358			9	+25.586	-11.908		
	181					241					301					361			
9	+42.103	+35.779			9	-56.172	-16.844			9	-12.633	-46.110			14	+25.737	-42.492	65 1766	9.2
9	+42.251	+57.078			9	-55.922	-13.063	65 1714	9.9	9	-12.199	-64.386			16	+26.019	-31.820	65 1767	8.6
9	+43.240	+18.023			9	-55.695	-13.212			10	-11.906	-25.395	65 1740	9.7	9	+26.529	-24.175		
9	+43.953	+52.126			10	-55.599	-34.467	65 1713	9.7	11	-11.381	-39.365	65 1741	9.9	13	+26.619	-21.136	65 1768	9.2
9	+44.330	+48.340	64 1775	0.9	10	-54.333	-27.832	65 1716	9.9	9	-11.271	-43.656			9	+27.228	-36.179		
9	+44.877	+ 2.415			9	-53.708	-64.761	65 1715	9.9	9	-11.253	-42.419			9	+27.669	-37.679		
9	+45.589	+13.050			9	-53.250	- 5.220			9	- 9.136	-25.460	65 1743	9.9	9	+27.853	- 9.675	65 1769	9.9
9	+46.084	+ 2.001			10	-52.900	-53.302	65 1717	9.9	9	- 8.763	-55.552			9	+28.672	-22.405		
10	+46.122	+24.262	64 1777	9.9	9	-52.058	-24.547			26	- 7.556	-49.591	65 1744	7.2	9	+29.847	-42.796		
9	+46.908	+25.473			10	-52.028	-19.846	65 1718	9.9	9	- 7.383	-19.578			10	+30.390	-35.663	65 1770	9.9
	191					251					311					371			
9	+46.985	+24.457			10	-51.729	-10.462	65 1720	9.9	9	- 7.142	-32.359	65 1745	9.9	9	+30.971	-55.720		
9	+47.772	+50.626			9	-51.645	-27.741			15	- 6.733	-53.097	65 1746	8.8	9	+31.235	-26.218		
10	+48.156	+11.290	64 1778	9.8	22	-51.523	-28.120	65 1719	8.0	9	- 4.644	-25.818			9	+33.314	-19.884		
9	+48.607	+50.072			9	-51.374	-41.179			9	- 4.614	- 2.506			14	+35.477	-55.952	65 1772	9.4
9	+49.154	+ 8.174			9	-51.026	-13.656			9	- 4.520	-48.574			15	+35.497	-43.612	65 1771	8.9
9	+49.657	+54.992	63 2119	9.9	10	-49.345	-43.322	65 1721	9.7	9	- 4.448	-21.021	65 1748	9.9	9	+36.568	-13.151		
9	+49.659	+55.000			9	-49.288	-42.483	65 1722	9.9	15	- 4.421	-51.568	65 1747	8.8	9	+37.513	-11.010		
10	+50.837	+ 0.441			9	-48.395	-34.749			9	- 3.577	-33.801			14	+38.662	- 4.259	64 1773	9.4
11	+51.931	+20.495	64 1779	9.5	14	-48.328	-34.871	65 1723	8.9	12	- 2.280	-22.597	65 1749	9.2	9	+38.842	-48.562		
10	+52.053	+ 8.358	64 1781	9.9	9	-46.390	-41.081	65 1724	9.9	9	- 1.946	-50.125	65 1750	9.9	11	+39.866	-22.305	65 1773	9.7
	201					261					321					381			
9	+52.066	+44.516			9	-45.834	-35.770			9	- 1.539	-31.396			9	+40.428	-29.091		
11	+52.091	+18.248	64 1780	9.7	9	-45.276	-19.287			9	- 0.792	-59.815			9	+41.512	- 8.374		
15	+52.177	+ 9.559	64 1782	8.6	9	-43.992	- 8.345			9	+ 0.986	-36.682			9	+42.053	-40.336		
20	+52.842	+60.921	63 2124	7.3	10	-40.997	-28.034	65 1725	9.6	10	+ 1.069	- 8.074	64 1739	9.8	9	+42.446	-27.707		
9	+54.003	+ 3.315			9	-40.480	-50.706	65 1726	9.9	10	+ 1.150	-18.890	65 1751	9.9	9	+42.484	-25.663		
9	+54.417	+61.521			9	-39.822	-50.344			9	+ 2.140	-47.724			15	+42.577	-23.254	65 1774	9.1
9	+54.440	+21.331			9	-39.629	-48.800			9	+ 2.780	-35.985			9	+42.652	-23.174		
9	+54.708	+62.129			9	-39.604	-32.369	65 1727	9.9	11	+ 3.390	-54.240	65 1752	9.4	16	+42.968	- 5.485	64 1776	8.5
9	+55.272	+ 3.281			9	-39.493	-16.680			9	+ 3.684	-40.409			11	+43.186	-19.045	65 1775	9.9
9	+55.639	+42.159			9	-38.811	-32.005			10	+ 3.841	-51.803	65 1753	9.9	15	+43.396	-40.228	65 1777	9.0
	211					271					331					391			
10	+56.009	+ 0.673	64 1786	9.8	9	-37.660	-44.997	65 1728	9.9	9	+ 4.598	-31.642			10	+43.777	- 3.755		
10	+56.231	+11.651	64 1785	9.9	14	-37.235	-42.125	65 1729	8.9	10	+ 5.479	- 0.906	64 1743	9.8	16	+43.846	-10.213	65 1776	8.7
10	+56.316	+47.501	64 1783	9.8	10	-35.957	- 9.455	65 1730	9.8	9	+ 5.770	-58.250			10	+44.117	-17.348	65 1778	9.9
10	+56.490	+62.874	63 2134	9.4	9	-35.099	-46.877			9	+ 7.176	-51.885			21	+44.701	-17.450	65 1779	8.5
10	+56.937	+45.061	64 1784	9.9	9	-33.507	-43.941			14	+ 7.605	-62.904	65 1756	9.0	9	+45.413	-28.013		
9	+58.400	+56.764			9	-33.301	-54.361			15	+ 8.798	-15.451	65 1757	9.0	9	+45.643	- 4.681		
9	+59.790	+37.066			9	-33.207	- 1.560	64 1718	9.8	11	+11.128	-35.545	65 1758	9.8	9	+46.071	-12.696		
9	+60.360	+41.821			9	-33.055	- 0.926			10	+11.224	-59.845	65 1759	9.8	9	+46.274	-43.901		
9	+60.718	+43.681	64 1787	9.9	9	-32.986	-24.219			12	+11.390	-47.253	65 1760	9.4	9	+46.947	-63.636	65 1780	9.9
15	+61.260	+39.821	64 1788	9.1	14	-32.429	-46.090	65 1731	9.3	9	+12.243	- 1.991			9	+47.195	-15.313		
	221					281					341					401			
10	+61.558	+21.968	64 1789	9.9	11	-31.948	-11.556	65 1732	9.5	10	+12.816	-10.348	65 1761	9.7	9	+47.457	-26.087		
9	+61.730	+53.850			9	-31.666	-52.149			11	+13.140	-10.166	65 1762	9.4	9	+47.781	-25.381		
10	+62.501	+11.311	64 1790	9.7	9	-30.463	-37.379	65 1733	9.9	9	+14.978	-53.009			14	+48.546	-24.815	65 1781	9.4
10	+62.760	+ 2.718	64 1793	9.7	11	-29.108	-14.861	65 1734	9.4	9	+16.568	-30.185			10	+49.104	-44.242		
9	+63.177	+42.245			12	-28.805	-14.512	65 1735	9.3	10	+16.877	- 7.959	64 1755	9.4	10	+49.400	-34.400	65 1782	9.9
10	+64.077	+38.122	64 1792	9.8	9	-28.005	-39.353			9	+17.118	-45.949			9	+49.532	-44.458		
9	+64.166	+62.752			9	-27.775	-18.129			9	+18.449	-29.734			9	+50.854	- 3.692		
9	+64.339	+47.451			9	-26.243	-20.129			10	+19.044	- 4.422	64 1756	9.9	9	+51.321	-19.434		
10	+64.497	+11.320	64 1794	9.9	9	-25.709	-21.001			10	+19.626	-44.579	65 1763	9.9	9	+51.406	-49.317		
9	+64.525	+10.431			9	-22.910	-14.472			11	+20.206	-26.470	65 1764	9.5	9	+51.413	-33.283		

C.P.D.				C.P.D.				C.P.D.				C.P.D.					
Diam.	x	y		Diam.	x	y		Diam.	x	y		Diam.	x	y			
No.	Mag.	No.	Mag.	No.	Mag.	No.	Mag.	No.	Mag.	No.	Mag.	No.	Mag.	No.	Mag.		
PLATE CENTRE.																	
12h 9m, - 65°.																	
Plate 3289. 1910, Apr. 5.																	
PROVISIONAL CONSTANTS.																	
a = - .01149 d = - .00000																	
b = + .00012 e = - .01131																	
c = + .0047 f = - .0021																	
To obtain standard co-ordinates, ξ, η																	
$\xi = x + ax + by + c$																	
$\eta = y + dx + ey + f$																	
411,																	
9	+51.573	-39.645	65 1783	9.9	10	-64.876	+31.163	64 1780	9.7	9	-53.360	+0.724	64 1793	9.7	9	-44.382	+57.272
10	+53.898	-30.056			13	-64.770	+9.787			28	-52.986	+3.086			9	-44.063	+57.671
9	+53.919	-17.784			37	-64.756	+17.812			9	-52.946	+16.338			12	-43.640	+46.207
9	+54.908	-26.102			10	-64.092	+12.357			9	-52.887	+5.797			14	-43.433	+21.481
9	+55.234	-23.502			34	-64.068	+7.953			15	-52.748	+44.696			13	-43.350	+44.414
421																	
9	+58.146	-42.467	65 1786	9.5	56	-64.046	+9.171	64 1782	8.6	11	-52.689	+51.301	64 1794	9.9	9	-42.754	+6.883
10	+60.487	-52.398			9	-63.955	+2.778			11	-52.495	+8.301			11	-42.078	+41.730
9	+60.892	-2.806			42	-63.618	+62.632			9	-52.458	+16.949			10	-41.799	+12.432
30	+62.292	-0.625			10	-63.570	+17.363			12	-52.316	+3.996			9	-41.694	+8.829
10	+62.363	-54.275			10	-63.494	+5.513			9	-52.067	+39.279			9	-41.398	+15.625
11																	
9	+64.854	-25.236	65 1788	7.1	11	-63.239	+37.007	63 2134	9.4	16	-51.879	+11.796	63 2142	9.5	21	-41.146	+60.228
9	+65.001	-44.069			12	-63.210	+59.643			12	-51.846	+48.157			34	-41.053	+21.683
29	+65.003	-10.597			15	-62.943	+41.907			10	-51.823	+31.223			20	-40.642	+23.723
					9	-62.924	+58.103			10	-51.780	+10.901			9	-40.594	+51.038
					9	-62.888	+37.436			9	-50.766	+13.731			9	-40.392	+60.488
21																	
12	-61.849	+2.876	64 1784	9.9	12	-62.646	+10.542	64 1783	9.8	32	-50.690	+63.571	63 2144	9.2	15	-40.330	+18.737
18	-61.833	+44.922			29	-62.641	+47.298			15	-50.222	+21.193			16	-39.854	+14.547
15	-61.754	+3.044			14	-62.620	+21.063			12	-49.891	+28.752			21	-39.818	+1.558
11	-61.726	+15.721			11	-62.278	+19.941			12	-49.766	+33.781			13	-39.795	+17.562
9	-61.484	+55.209			9	-61.863	+41.916			13	-49.619	+2.520			11	-39.665	+52.649
31																	
12	-61.240	+56.689	64 1785	9.9	12	-61.849	+2.876	64 1784	9.9	33	-49.315	+53.316	63 2145	5.3	15	-39.640	+35.931
9	-61.222	+60.951			18	-61.833	+44.922			11	-49.165	+35.184			14	-39.621	+7.381
9	-60.996	+61.052			15	-61.754	+3.044			30	-49.149	+3.148			15	-39.500	+35.001
15	-60.481	+3.131			11	-61.726	+15.721			22	-49.027	+10.303			13	-39.208	+16.816
10	-60.417	+23.802			9	-61.484	+55.209			12	-48.727	+14.644			12	-39.126	+20.551
41																	
24	-58.202	+41.928	64 1786	9.8	12	-61.240	+56.689	64 1785	9.9	108	-48.715	+56.590	63 2147	7.5	12	-38.526	+13.960
29	-57.994	+43.812			9	-61.222	+60.951			9	-48.704	+45.818			9	-38.485	+25.520
12	-57.724	+54.029			9	-60.996	+61.052			11	-48.652	+0.888			14	-38.220	+12.097
11	-57.169	+59.813			15	-60.481	+3.131			14	-48.449	+5.355			26	-38.114	+57.547
44	-57.162	+39.993			10	-60.417	+23.802			12	-48.321	+14.221			10	-37.877	+14.740
101																	
9	-56.995	+45.281	64 1787	9.9	28	-60.131	+11.532	64 1784	9.9	9	-48.226	+48.415	63 2147	7.5	15	-37.879	+17.018
12	-56.746	+2.428			9	-59.724	+3.066			14	-48.184	+6.354			14	-37.643	+17.018
11	-56.588	+48.138			29	-59.569	+0.559			16	-48.129	+15.203			15	-37.581	+18.851
15	-55.917	+63.088			11	-59.379	+53.323			11	-47.920	+42.309			11	-37.555	+52.949
27	-55.570	+22.211			11	-59.006	+3.641			10	-47.756	+28.990			10	-37.454	+11.867
161																	
14	-32.644	+26.122	64 1788	9.1	10	-58.978	+21.498	64 1785	9.9	12	-47.685	+13.656	63 2147	7.5	12	-37.376	+35.124
					9	-58.874	+4.074			10	-47.451	+12.087			12	-36.866	+33.683
					10	-58.646	+22.866			13	-47.238	+47.466			10	-36.833	+58.919
					14	-58.436	+37.138			9	-47.190	+56.351			22	-36.787	+1.248
					9	-58.351	+61.446			12	-46.972	+56.727			9	-36.739	+4.860
161																	
15	-33.955	+39.084	64 1789	9.9	24	-58.202	+41.928	64 1786	9.8	10	-46.838	+49.124	63 2147	7.5	10	-36.487	+4.320
29	-33.944	+56.040			29	-57.994	+43.812			11	-46.610	+55.845			12	-36.396	+19.539
11	-33.772	+12.407			12	-57.724	+54.029			9	-46.392	+9.832			12	-36.378	+46.606
13	-33.641	+7.178			11	-57.169	+59.813			9	-46.115	+41.876			9	-36.316	+13.538
9	-33.470	+58.204			44	-57.162	+39.993			14	-45.866	+29.848			9	-36.281	+5.855
161																	
14	-32.644	+26.122	64 1789	9.9	10	-58.978	+21.498	64 1785	9.9	12	-47.685	+13.656	63 2147	7.5	14	-35.482	+46.634
					9	-58.874	+4.074			10	-47.451	+12.087			15	-35.349	+5.917
					10	-58.646	+22.866			13	-47.238	+47.466			15	-35.265	+1.862
					14	-58.436	+37.138			9	-47.190	+56.351			9	-34.080	+15.861
					9	-58.351	+61.446			12	-46.972	+56.727			14	-34.013	+49.560
161																	
15	-33.955	+39.084	64 1789	9.9	24	-58.202	+41.928	64 1786	9.8	10	-46.838	+49.124	63 2147	7.5	15	-33.955	+39.084
29	-33.944	+56.040			29	-57.994	+43.812			11	-46.610	+55.845			12	-36.396	+19.539
11	-33.772	+12.407			12	-57.724	+54.029			9	-46.392	+9.832			12	-36.378	+46.606
13	-33.641	+7.178			11	-57.169	+59.813			9	-46.115	+41.876			9	-36.316	+13.538
9	-33.470	+58.204			44	-57.162	+39.993			14	-45.866	+29.848			9	-36.281	+5.855
161																	
14	-32.644	+26.122	64 1789	9.9	10	-58.978	+21.498	64 1785	9.9	12	-47.685	+13.656	63 2147	7.5	14	-35.482	+46.634
					9	-58.874	+4.074			10	-47.451	+12.087			15	-35.349	+5.917
					10	-58.646	+22.866			13	-47.238	+47.466			15	-35.265	+1.862
					14	-58.436	+37.138			9	-47.190	+56.351			9	-34.080	+15.861
					9	-58.351	+61.446			12	-46.972	+56.727			14	-34.013	+49.560
161																	
15	-33.955	+39.084	64 1789	9.9	24	-58.202	+41.928	64 1786	9.8	10	-46.838	+49.124	63 2147	7.5	15	-33.955	+39.084
29	-33.944	+56.040			29	-57.994	+43.812			11	-46.610	+55.845			12	-36.396	+19.539
11	-33.772	+12.407			12	-57.724	+54.029			9	-46.392	+9.832			12	-36.378	+46.606
13	-33.641	+7.178			11	-57.169	+59.813			9	-46.115	+41.876			9	-36.316	+13.538
9	-33.470	+58.204			44	-57.162	+39.993			14	-45.866	+29.848			9	-36.281	+5.855
161																	
14	-32.644	+26.122	64 1789	9.9	10	-58.978	+21.498	64 1785	9.9	12	-47.685	+13.656	63 2147	7.5	14	-35.482	+46.634
					9	-58.874	+4.074			10	-47.451	+12.087			15	-35.349	+5.917
					10	-58.646	+22.866			13	-47.238	+47.466			15	-35.265	+1.862
					14	-58.436	+37.138			9	-47.190	+56.351			9	-34.080	+15.861
					9	-58.351	+61.446			12	-46.972	+56.727			14	-34.013	+49.560
161																	
15	-33.955	+39.084	64 1789	9.9	24	-58.202	+41.928	64 1786	9.8	10	-46.838	+49.124	63 2147	7.5	15	-33.955	+39.084
29	-33.944	+56.040			29	-57.994	+43.812			11	-46.610	+55.845			12	-36.396	+19.539
11	-33.772	+12.407			12	-57.724	+54.029			9	-46.392	+9.832			12	-36.378	+46.606
13	-33.641	+7.178			11	-57.169	+59.813			9	-46.115	+41.876			9	-36.316	+13.538
9	-33.470	+58.204			44	-57.162	+39.993			14	-45.866	+29.848			9	-36.281	+5.855
161																	
14	-32.644	+26.122	64 1789	9.9	10	-58.978	+21.498	64 1785	9.9	12	-47.685	+13.656	63 2147	7.5	14	-35.482	+46.634
					9	-58.874	+4.074			10	-47.451	+12.087			15	-35.349	+5.917
					10	-58.646	+22.866			13	-47.238	+47.466			15	-35.265	+1.862
					14	-58.436	+37.138			9	-47.190	+56.351			9	-34.080	+15.861
					9	-58.351	+61.446			12	-46.972	+56.727			14	-34.013	+49.560
161																	
15	-33.955	+39.084	64 1789	9.9	24	-58.202	+41.928	64 1786	9.8	10	-46.838	+49.124	63 2147	7.5	15	-33.955	+39.084
29	-33.944	+56.040			29	-57.994	+43.812			11	-46.610	+55.845			12	-36.396	+19.539
11	-33.772	+12.407			12	-57.724	+54.029			9	-46.392	+9.832			12	-36.378	+46.606
13	-33.641	+7.178			11	-57.169	+59.813			9	-46.115	+41.876			9	-36.316	+13.538
9	-33.470	+58.204			44	-57.162	+39.993			14	-45.866	+29.848			9	-36.281	+5.855
161																	
14	-32.644	+26.122	64 1789	9.9	10	-58.978	+21.498	64 1785	9.9	12	-47.685	+13.656	63 2147	7.5	14	-35.482	+46.634
					9	-58.874	+4.074			10	-47.451	+12.087			15	-35.349	+5.917
					10	-58.646	+22.866			13	-47.238	+47.466			15	-35.265	+1.862
					14	-58.436	+37.138			9	-47.190	+56.351			9	-34.080	+15.861
					9	-58.351	+61.446			12	-46.972	+56.727			14	-34.013	+49.56

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
9	-32°599	+3°938			10	-19°146	+3°130			15	-10°822	+39°345			10	-0°979	+31°815		
11	-32°521	+55°497			13	-18°767	+15°904			9	-10°730	+62°344			36	-0°926	+54°305	63 2201	8.8
15	-32°318	+3°158			12	-18°575	+5°894			9	-10°647	+35°877			10	-0°718	+7°787		
11	-32°314	+18°481			11	-18°156	+8°562			12	-10°560	+15°142			10	-0°448	+55°467		
24	-31°431	+0°278	64 1803	9.5	9	-18°147	+37°611			12	-10°294	+9°187			28	+0°090	+50°331	64 1825	9.5
11	-31°223	+2°254			16	-18°000	+42°367			9	-9°885	+6°762			12	+0°096	+60°620		
11	-31°224	+47°272			9	-17°944	+55°607			10	-9°292	+12°646			9	+0°227	+61°117		
11	-30°753	+51°421			24	-17°778	+58°725	63 2179	9.4	12	-9°284	+43°976			30	+0°360	+20°710	64 1827	9.1
9	-30°487	+56°925			9	-17°679	+32°187			28	-9°162	+35°215	64 1820	9.5	28	+0°387	+23°983	64 1826	9.5
24	-30°131	+53°892	63 2161	9.9	9	-17°451	+18°393			9	-8°961	+58°489			15	+0°690	+32°922		
	181					241					301					361			
16	-30°014	+10°585	64 1805	9.7	12	-17°436	+41°672			12	-8°447	+23°797			14	+0°816	+25°957		
9	-29°984	+57°804			11	-17°414	+18°922	63 2180	9.8	15	-8°267	+42°162			11	+0°875	+0°690		
9	-29°912	+3°805			22	-17°311	+64°939			13	-7°852	+17°555			28	+1°040	+63°579	63 2205	9.1
11	-29°870	+41°076			9	-17°291	+50°364			16	-7°703	+45°018	64 1822	9.9	10	+1°168	+63°922		
15	-29°704	+50°164			9	-17°173	+29°582			9	-7°675	+56°221			9	+1°341	+20°331		
9	-29°539	+32°943			10	-17°155	+28°858			14	-7°638	+37°831			11	+1°539	+63°801		
26	-29°484	+6°780	64 1806	9.8	12	-17°091	+36°090			9	-7°597	+13°003			15	+1°982	+23°051		
9	-29°466	+33°097			9	-17°071	+11°747			13	-7°517	+3°208			10	+2°025	+20°554		
24	-29°395	+11°116	64 1807	9.9	49	-16°875	+36°859	64 1815	8.2	12	-7°489	+20°853			10	+2°140	+57°455		
10	-29°181	+4°438			11	-16°851	+2°037			12	-7°430	+11°502			15	+2°152	+52°259		
	191					251					311					371			
9	-28°064	+25°688			29	-16°834	+53°685	63 2181	9.2	11	-6°869	+41°168			15	+2°383	+36°146		
22	-27°908	+42°208	64 1808	9.7	10	-16°787	+59°696			10	-6°846	+11°152			10	+2°794	+29°773		
11	-27°791	+4°913			39	-16°673	+5°506	64 1813	8.8	9	-6°531	+51°798			11	+3°111	+42°444		
14	-27°703	+36°314			15	-16°630	+42°153			26	-6°323	+59°761	63 2192	9.4	13	+3°291	+40°148		
13	-27°315	+41°124			13	-16°605	+25°199			9	-6°312	+15°383			15	+3°306	+3°595		
13	-26°965	+46°474			15	-16°347	+3°209			12	-6°297	+20°525			9	+3°649	+24°589		
14	-26°944	+9°995			16	-16°341	+52°239	64 1816	9.9	10	-6°005	+10°426			12	+3°816	+51°987		
11	-26°864	+27°556			28	-16°313	+62°388	63 2184	9.2	9	-5°773	+51°289			31	+4°122	+61°499	63 2208	8.8
10	-26°704	+51°311			9	-16°177	+8°892			13	-5°677	+22°261			15	+4°185	+36°703		
10	-26°401	+24°768			15	-16°175	+9°207			15	-5°323	+14°400			9	+4°210	+42°548		
	201					261					321					381			
4	-26°090	+12°949			10	-16°153	+37°641			16	-5°278	+14°912			14	+4°219	+14°821		
9	-26°085	+30°767			9	-15°942	+21°644			10	-5°242	+38°087			16	+4°249	+45°002	64 1830	9.9
16	-25°650	+45°010	64 1809	9.9	34	-15°855	+33°085	64 1817	8.9	16	-5°053	+4°210			22	+4°283	+35°778	64 1829	9.9
9	-25°523	+39°510			9	-15°831	+41°644			10	-4°981	+34°751			10	+4°427	+12°734		
13	-25°397	+43°480			9	-15°591	+21°836			13	-4°873	+10°842			12	+4°483	+42°174		
10	-25°062	+50°133			10	-15°445	+7°173			10	-4°815	+14°266			11	+4°645	+46°878		
9	-24°685	+56°533			12	-15°428	+0°807			10	-4°393	+0°678			15	+4°805	+44°364		
9	-24°634	+59°577			10	-15°387	+0°099			12	-4°213	+18°403			9	+4°819	+18°626		
11	-24°300	+53°435			62	-15°317	+63°432	63 2185	6.7	22	-4°124	+56°749	63 2196	9.9	10	+5°010	+14°007		
9	-24°238	+57°692			10	-15°085	+56°546			12	-4°026	+17°103			32	+5°138	+22°923	64 1831	9.0
	211					271					331					391			
12	-24°106	+56°896			12	-14°595	+50°433			9	-3°298	+61°506			11	+5°368	+64°403		
11	-23°710	+8°440			12	-14°487	+35°435			9	-3°142	+58°447			11	+5°472	+39°097		
11	-23°670	+10°709			13	-14°228	+17°642			11	-2°792	+24°421			11	+5°522	+28°938		
13	-23°398	+7°827			15	-13°901	+54°707			12	-2°587	+6°791			15	+5°607	+18°248		
9	-23°300	+12°509			9	-13°878	+32°437			12	-2°492	+57°972			11	+5°631	+13°544		
13	-22°554	+7°604			11	-13°754	+10°546			24	-2°478	+19°785	64 1824	9.9	12	+5°837	+46°592		
33	-22°500	+47°863	64 1810	8.9	9	-13°730	+15°930			9	-2°425	+42°035			9	+5°975	+16°885		
12	-21°869	+58°857			11	-13°661	+6°084			10	-2°335	+32°890			10	+6°251	+55°597		
9	-21°804	+1°886			11	-13°652	+61°402			10	-2°260	+39°427			9	+6°286	+63°833		
13	-21°640	+57°740			11	-13°381	+59°103			12	-2°209	+11°488			9	+6°618	+10°207		
	221					281					341					401			
24	-21°463	+47°643	64 1811	9.9	9	-12°868	+28°904			9	-2°159	+27°545			33	+6°674	+59°528	63 2211	9.0
10	-21°304	+4°786			14	-12°761	+49°178	64 1818	9.9	9	-2°103	+44°655			10	+7°008	+9°317		
10	-20°876	+52°577			14	-12°734	+49°127			14	-2°012	+23°527			12	+7°150	+56°584		
10	-20°742	+10°461			9	-12°391	+27°107			10	-1°898	+53°075			26	+7°280	+6°151	64 1832	9.8
12	-20°201	+44°992			14	-12°102	+42°366			9	-1°889	+11°686			10	+7°332	+26°453		
14	-20°126	+58°239			15	-11°736	+34°235			10	-1°226	+25°595			16	+7°434	+13°865		
28	-19°877	+31°977	64 1812	9.5	10	-11°489	+43°594			9	-1°173	+18°065			10	+7°696	+37°744		
9	-19°655	+54°916			15	-11°369	+46°362			13	-1°145	+1°242			11	+7°856	+6°399		
15	-19°616	+47°805			14	-11°172	+35°850			11	-1°044	+55°369			34	+8°064	+48°872	64 1833	8.9
12	-19°611	+59°710			9	-11°061	+4°800			9	-0°989	+61°494			9	+8°070	+13°821		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,					531,					591,			
11	+ 8.103	+53.294			11	+13.675	+62.739			11	+19.025	+ 4.989			9	+26.687	+ 2.328		
9	+ 8.302	+63.723			10	+13.807	+ 6.951			9	+19.030	+36.758			9	+26.776	+ 8.173		
12	+ 8.505	+ 7.233			11	+13.832	+27.497			9	+19.316	+55.530			9	+26.793	+45.879		
9	+ 8.540	+ 1.778			10	+13.929	+18.959			9	+19.318	+38.365			12	+26.874	+30.735		
9	+ 8.609	+44.979			9	+14.179	+ 8.263			15	+19.506	+18.671			9	+26.935	+26.645		
10	+ 8.646	+31.517			46	+14.249	+ 2.988	64 1839	7.8	10	+19.652	+56.792			9	+27.055	+12.490		
20	+ 8.690	+27.027	64 1834	9.9	11	+14.383	+19.990			10	+19.708	+21.363			15	+27.119	+38.714		
12	+ 9.038	+64.101			21	+14.456	+27.593			12	+19.726	+30.954			9	+27.168	+26.080		
10	+ 9.064	+51.878			10	+14.711	+60.569			9	+19.769	+26.087			26	+27.171	+46.194	64 1855	9.3
9	+ 9.148	+52.752			41	+14.733	+63.029	63 2219	8.2	9	+20.363	+ 9.595			9	+27.302	+ 1.532		
	421					481					541					601			
10	+ 9.224	+ 6.541			11	+14.784	+26.085			9	+20.790	+ 6.414			24	+27.305	+20.432	64 1856	9.9
9	+ 9.444	+25.325			27	+14.785	+54.352	63 2221	9.7	15	+21.030	+39.910			12	+27.315	+11.008		
15	+ 9.536	+34.827			10	+14.823	+19.680			15	+21.160	+23.710			10	+27.473	+35.882		
12	+ 9.626	+54.426			12	+14.846	+16.642			11	+21.221	+54.373			13	+27.591	+40.684		
14	+ 9.645	+41.343			11	+14.899	+32.971			11	+21.231	+ 0.676			16	+27.692	+ 1.091		
9	+ 9.686	+62.580			11	+14.989	+49.753			11	+21.362	+33.850			9	+27.717	+40.239		
21	+ 9.740	+53.800	63 2213	9.9	19	+15.025	+30.979			12	+21.423	+42.640			9	+27.955	+41.802		
11	+ 9.790	+ 2.246			14	+15.096	+22.148			11	+21.442	+38.932			12	+28.139	+45.683		
9	+10.133	+47.779			30	+15.302	+16.864	64 1840	9.2	13	+21.444	+ 6.689			9	+28.178	+ 8.529		
15	+10.238	+63.063			9	+15.488	+47.160			12	+21.474	+64.427			20	+28.458	+ 6.343	64 1857	9.9
	431					491					551					611			
13	+10.270	+45.745			11	+15.626	+60.019			9	+21.582	+42.347			12	+28.473	+37.695		
11	+10.353	+15.131			24	+15.627	+28.423	64 1841	9.8	27	+21.686	+37.772	64 1850	9.4	9	+28.512	+26.238		
9	+10.381	+20.200			9	+15.727	+12.965			9	+21.719	+45.197			15	+28.526	+ 9.457		
14	+10.393	+ 3.268			15	+15.736	+47.854			15	+21.827	+ 5.979			15	+28.638	+47.478		
9	+10.471	+52.266			16	+15.825	+31.846			15	+21.908	+41.120			12	+28.740	+12.960		
14	+10.480	+ 3.238			11	+15.984	+18.246			11	+22.260	+50.462			15	+28.818	+ 9.011		
13	+10.558	+28.986			9	+16.099	+33.032			9	+22.265	+38.598			9	+28.834	+51.098		
9	+10.602	+33.658			10	+16.260	+61.172			10	+22.468	+30.232			9	+28.879	+21.711		
50	10.615	+22.016	64 1835	8.0	10	+16.293	+20.119			23	+22.596	+20.117	64 1851	9.9	9	+29.113	+43.702		
9	+10.631	+43.155			9	+16.302	+62.212			10	+22.922	+45.912			11	+29.140	+34.656		
	441					501					561					621			
12	+10.841	+45.155			19	+16.443	+20.989	64 1842	9.9	12	+23.026	+11.054			34	+29.178	+52.476	63 2239	8.8
9	+10.877	+51.839			12	+16.638	+16.000			11	+23.434	+32.822			9	+29.191	+ 3.637		
11	+10.913	+64.553			15	+16.684	+14.091			11	+23.473	+57.999			11	+29.258	+ 7.875		
9	+11.093	+53.298			10	+16.796	+33.044			12	+23.595	+ 2.732			15	+29.393	+ 8.283		
34	+11.095	+47.114	64 1836	9.0	9	+16.839	+26.323			9	+23.746	+10.292			9	+29.462	+ 5.712		
9	+11.325	+18.434			15	+17.039	+61.748	63 2227	9.9	11	+23.817	+59.065			9	+29.569	+22.524		
11	+11.593	+16.124			14	+17.054	+21.103			11	+23.917	+20.011			9	+29.701	+ 0.794		
15	+11.766	+36.318			23	+17.238	+19.062			25	+24.392	+63.951	63 2232	9.5	10	+29.820	+ 9.435		
10	+11.821	+16.707			35	+17.348	+18.340	64 1843	8.8	10	+24.529	+45.160			16	+30.053	+41.135		
27	+11.845	+44.111	64 1838	9.7	11	+17.382	+39.776			10	+24.608	+37.106			12	+30.088	+64.877		
	451					511					571					631			
14	+11.915	+34.898			39	+17.389	+14.971	64 1845	8.8	12	+24.612	+18.072			15	+30.249	+ 4.004		
15	+12.070	+10.019			15	+17.542	+40.219			15	+24.637	+ 7.113			15	+30.303	+18.688		
9	+12.173	+57.230			9	+17.729	+34.130			12	+24.709	+52.280			11	+30.573	+ 9.975		
10	+12.193	+49.273			13	+17.774	+45.462			9	+25.098	+26.535			12	+30.574	+22.735		
14	+12.272	+48.136			27	+17.846	+48.488	64 1846	9.4	26	+25.184	+12.951	64 1853	9.9	12	+30.578	+18.947		
16	+12.602	+42.875			11	+17.855	+52.885			15	+25.200	+50.222			29	+31.260	+25.885	64 1858	9.2
11	+12.659	+ 5.931			27	+17.873	+ 4.606	64 1847	9.8	9	+25.414	+63.226			9	+31.305	+19.459		
9	+12.731	+23.705			10	+17.946	+20.533			9	+25.453	+38.976			21	+31.418	+ 7.407		
11	+12.868	+ 8.709			9	+18.053	+26.495			15	+25.501	+35.014			10	+31.611	+36.549		
10	+12.984	+34.692			10	+18.076	+18.204			9	+25.586	+48.380			16	+31.748	+14.667		
	461					521					581					641			
11	+12.990	+24.380			15	+18.170	+37.374			9	+25.631	+ 4.470			10	+31.906	+30.662		
10	+13.021	+44.159			10	+18.238	+ 2.737			15	+25.636	+52.824			10	+31.916	+51.907		
9	+13.044	+36.101			15	+18.306	+26.985			11	+25.713	+42.908			9	+31.952	+17.563		
9	+13.089	+19.302			10	+18.364	+33.294			9	+25.925	+45.520			10	+31.962	+33.718		
9	+13.128	+42.697			9	+18.420	+15.285			12	+26.132	+50.966			10	+31.975	+47.842		
9	+13.129	+55.036			9	+18.489	+26.695			14	+26.277	+40.422			9	+32.037	+35.508		
16	+13.301	+55.386			13	+18.536	+ 0.859			11	+26.282	+62.215			36	+32.235	+39.310	64 1859	9.9
16	+13.335	+57.970			25	+18.675	+31.898	64 1849	9.9	12	+26.480	+59.134			12	+32.284	+ 6.739		
9	+13.351	+20.449			11	+18.853	+13.621			11	+26.641	+16.358			9	+32.314	+28.225		
14	+13.594	+26.876			9	+18.958	+10.571			33	+26.666	+50.824	64 1854	9.1	13	+32.412	+60.129		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651,					711,					771,					831,			
12	+32°449	+35°982			11	+37°671	+44°864			11	+42°722	+32°379			11	+50°064	+36°563		
15	+32°456	+2°539			11	+37°748	+32°462			13	+42°727	+6°355			9	+50°089	+5°236		
10	+32°629	+40°250			9	+38°009	+35°549			11	+42°757	+34°616			12	+50°178	+24°173		
10	+32°680	+51°862			9	+38°307	+27°387			12	+42°773	+7°309			10	+50°214	+34°883		
9	+32°751	+37°378			45	+38°416	+54°638	63 2246	8·2	13	+42°956	+24°569			9	+50°264	+20°427		
10	+32°801	+15°934			10	+38°498	+47°140			12	+43°065	+25°223			15	+50°371	+54°044		
10	+32°854	+32°421			10	+38°514	+1°526			11	+43°256	+40°627			11	+50°379	+51°494		
25	+32°861	+36°614	64 1860	9·9	9	+38°571	+49°600			10	+43°319	+22°462			12	+50°736	+47°572		
15	+32°933	+5°987			10	+38°582	+30°928			9	+43°418	+15°717			11	+50°897	+36°984		
31	+33°035	+13°738	64 1862	8·9	14	+38°726	+11°470			10	+43°459	+27°915			10	+50°997	+32°302		
	661					721					781					841			
11	+33°066	+18°615			11	+38°761	+23°935			15	+43°493	+16°866			9	+51°029	+20°682		
29	+33°079	+41°946	64 1861	9·4	12	+38°847	+14°361			9	+43°540	+57°028			9	+51°120	+23°232		
10	+33°100	+3°608			30	+38°854	+13°774	64 1867	9·1	10	+43°545	+26°053			9	+51°252	+19°633		
10	+33°107	+52°511			15	+38°904	+34°852			27	+43°607	+58°299	63 2248	9·4	26	+51°338	+44°770	64 1880	9·9
9	+33°746	+27°171			11	+38°957	+33°152			15	+43°686	+12°248			46	+51°556	+52°118	63 2251	8·4
9	+33°756	+2°920			11	+39°218	+5°805			11	+43°707	+57°085			11	+51°813	+37°263		
9	+33°858	+38°787			14	+39°225	+32°458			13	+43°745	+4°147			9	+51°832	+46°745		
14	+34°066	+20°087			10	+39°354	+17°303			12	+43°794	+35°805			9	+52°104	+41°594		
16	+34°124	+50°363	64 1863	9·9	9	+39°413	+34°822			9	+43°830	+10°374			11	+52°213	+19°786		
11	+34°411	+44°538			16	+39°434	+7°021			11	+43°949	+22°551			9	+52°267	+39°301		
	671					731					791					851			
11	+34°499	+17°537			15	+39°540	+20°790			9	+44°553	+6°405			11	+52°327	+17°836		
11	+34°599	+47°290			13	+39°586	+17°053			9	+44°628	+38°253			10	+52°409	+10°551		
10	+34°763	+9°912			9	+39°642	+3°326			11	+45°151	+26°861			48	+52°675	+6°384	64 1883	7·9
9	+34°911	+15°741			14	+39°736	+46°908			12	+45°182	+24°367			12	+52°736	+43°274		
12	+34°971	+22°637			12	+39°749	+8°281			9	+45°492	+20°502			10	+52°751	+11°435		
9	+35°050	+1°754			9	+39°779	+10°708			9	+45°828	+0°321			16	+52°774	+52°376		
15	+35°151	+28°403			9	+39°835	+1°412			11	+46°016	+60°618			9	+52°804	+21°107		
12	+35°209	+30°062			9	+40°132	+41°666			9	+46°311	+3°540			20	+52°861	+0°139		
9	+35°242	+45°530			12	+40°164	+25°020			9	+46°376	+0°622			9	+52°890	+37°706		
11	+35°403	+4°888			10	+40°236	+18°473			11	+46°399	+37°711			9	+53°209	+23°599		
	681					741					801					861			
11	+35°423	+3°004			11	+40°289	+51°184			16	+46°478	+38°042			34	+53°253	+57°841	63 2252	9·9
11	+35°439	+28°735			27	+40°354	+10°241	64 1870	9·8	30	+46°700	+11°151	64 1874	9·4	30	+53°322	+22°037	64 1884	9·4
14	+35°634	+2°919			15	+40°414	+45°642			10	+46°798	+8°982			34	+53°359	+58°823	63 2253	9·7
9	+35°689	+5°956			9	+40°654	+25°291			15	+47°137	+15°005			9	+53°581	+62°937		
36	+35°782	+44°674	64 1864	9·9	11	+40°679	+51°767			10	+47°197	+44°778			15	+53°653	+13°321		
12	+35°828	+1°840			9	+40°745	+22°051			11	+47°210	+42°001			11	+53°736	+8°025		
11	+35°830	+52°398			13	+40°777	+26°711			9	+47°333	+11°434			9	+53°879	+10°732		
11	+35°861	+13°970			34	+40°813	+24°121	64 1871	8·8	10	+47°361	+9°699			28	+54°102	+21°796	64 1885	9·9
46	+35°934	+32°469	64 1865	8·0	9	+40°839	+35°783			9	+47°368	+9°175			9	+54°745	+37°454		
9	+35°966	+47°066			9	+40°844	+23°927			31	+47°403	+47°066	64 1873	9·2	11	+55°016	+24°048		
	691					751					811					871			
11	+36°091	+19°899			11	+40°863	+3°930			11	+47°579	+49°112			12	+55°233	+43°767		
10	+36°112	+2°985			9	+40°906	+21°401			14	+47°908	+3°547			10	+55°261	+44°241		
12	+36°139	+29°205			13	+40°919	+14°079			10	+47°933	+42°009			9	+55°558	+0°749		
9	+36°145	+23°271			15	+40°930	+47°092			15	+47°950	+28°719			32	+55°720	+28°689	64 1887	9·4
9	+36°402	+16°961			9	+41°001	+24°205			20	+48°005	+26°089			16	+55°929	+13°703	64 1888	9·6
15	+36°415	+7°197			15	+41°030	+45°732			12	+48°058	+25°201			53	+55°940	+49°119	64 1886	8·3
14	+36°418	+46°188			10	+41°081	+41°987			10	+48°068	+5°236			16	+55°989	+13°511		
10	+36°551	+8°390			16	+41°082	+39°116			11	+48°168	+32°258			11	+56°356	+23°478		
10	+36°765	+14°920			16	+41°375	+52°719	63 2247	9·9	9	+48°169	+48°996			15	+56°713	+25°319		
14	+36°837	+38°424			40	+41°480	+35°574	64 1872	8·6	36	+48°582	+34°875	64 1876	8·8	12	+56°744	+45°729		
	701					761					821					881			
12	+36°856	+19°751			13	+41°489	+26°863			10	+48°643	+5°733			12	+56°754	+63°626		
11	+36°879	+13°668			11	+41°497	+52°552			15	+48°668	+31°359			11	+56°785	+44°023		
9	+36°921	+8°437			12	+41°598	+10°364			9	+48°870	+5°823			12	+56°814	+29°793		
11	+36°982	+19°258			14	+41°811	+6°479			14	+48°904	+17°865			9	+57°362	+49°371		
11	+37°030	+19°879			15	+41°846	+30°513			9	+49°130	+18°708			10	+57°686	+32°720		
16	+37°127	+11°688			9	+42°098	+18°686			11	+49°136	+59°572			9	+57°910	+47°499		
11	+37°176	+61°863			11	+42°114	+35°805			36	+49°320	+13°700	64 1878	9·0	31	+58°666	+27°188	64 1890	9·9
30	+37°200	+4°600	64 1866	9·3	14	+42°420	+35°975			10	+49°463	+46°348			47	+58°917	+40°101	64 1889	8·5
10	+37°303	+39°360			11	+42°536	+47°274			45	+49°830	+51°526	64 1877	8·5	12	+59°098	+64°093		
15	+37°385	+25°322			15	+42°658	+23°060			11	+49°928	+35°948			13	+59°194	+61°924	63 2256	9·9

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	891,					951,					1011,					1071,			
36	+59°238	+52°325	63 2257	9°9	9	-59°387	-56°734	65 1784	9°5	10	-44°945	-1°155	65 1790	9°5	9	-34°402	-28°072	65 1796	9°2
10	+59°303	+58°358			9	-58°888	-35°401			12	-44°807	-6°533			12	-34°268	-49°125		
9	+59°461	+42°007			11	-58°717	-26°230			12	-44°439	-0°325			12	-33°967	-16°653		
10	+59°656	+57°726			9	-58°665	-6°253			24	-44°389	-24°399			11	-33°792	-47°619		
9	+59°714	+52°494			13	-58°589	-23°599			13	-44°360	-47°074			28	-33°622	-23°845		
9	+59°745	+15°364	64 1891	9°8	15	-58°522	-23°711	65 1785	9°2	11	-43°884	-28°922	65 1791	8°8	23	-33°454	-46°997	65 1795	9°8
13	+59°752	+26°189			11	-58°322	-16°931			10	-43°617	-9°277			12	-32°994	-16°419		
11	+59°810	+27°439			9	-58°177	-10°964			35	-42°981	-21°880			11	-32°740	-31°277		
34	+59°896	+38°202			10	-57°440	-26°976			9	-42°901	-3°923			10	-32°625	-41°809		
27	+60°001	+11°333			10	-56°173	-48°194			11	-42°740	-32°995			37	-32°513	-3°917		
	901					961					1021					1081			
11	+60°007	+37°541	64 1892	9°8	10	-56°154	-0°336	64 1791	6°9	10	-42°214	-46°183	65 1792	9°9	12	-32°269	-15°884	65 1797	9°5
12	+60°013	+22°483			10	-56°098	-8°815			12	-41°920	-40°949			9	-32°164	-14°736		
9	+60°026	+10°773			12	-56°018	-0°106			10	-41°885	-39°918			21	-32°029	-33°515		
12	+60°157	+41°219			36	-55°482	-37°359			11	-41°784	-33°284			12	-31°845	-17°929		
9	+60°238	+26°403			10	-55°022	-39°904			11	-41°746	-1°008			9	-31°837	-41°548		
9	+60°250	+9°735	64 1893	9°9	9	-54°905	-10°280	65 1786	9°5	16	-41°694	-32°783	65 1793	9°1	24	-31°406	-21°181	65 1800	9°4
9	+60°603	+5°783			9	-54°660	-3°731			10	-41°518	-15°564			10	-31°359	-44°886		
12	+60°694	+49°988			13	-54°462	-2°553			10	-41°326	-28°622			49	-31°305	-33°757		
11	+60°813	+1°913			10	-54°338	-42°311			9	-41°223	-9°782			9	-31°121	-18°883		
22	+60°834	+3°814			9	-54°316	-9°088			9	-41°122	-59°864			10	-31°087	-37°933		
	911					971					1031					1091			
32	+60°962	+19°802	64 1894	9°9	9	-54°148	-56°816	65 1787	9°5	10	-41°029	-22°572	64 1800	9°4	9	-30°534	-16°749	65 1801	9°9
11	+61°126	+8°904			9	-53°968	-2°407			11	-40°960	-40°851			9	-30°393	-63°337		
9	+61°261	+60°638			10	-53°774	-10°091			11	-40°447	-8°777			12	-30°084	-31°799		
11	+61°307	+56°353			72	-53°239	-0°269			9	-40°248	-8°275			9	-30°029	-54°235		
30	+61°656	+38°925			9	-52°393	-57°212			36	-40°227	-13°666			37	-29°991	-4°758		
14	+61°921	+41°327	63 2262	9°9	9	-52°265	-40°834	65 1788	7°1	11	-39°484	-19°144	65 1794	9°9	10	-29°923	-2°352	65 1802	9°6
36	+61°943	+53°417			10	-51°737	-44°867			9	-39°335	-56°605			9	-29°871	-16°617		
11	+61°951	+35°710			9	-51°719	-16°324			9	-39°168	-35°781			14	-29°851	-2°290		
9	+62°439	+1°301			30	-51°304	-52°048			26	-38°947	-3°954			10	-29°568	-12°488		
13	+62°563	+13°832			9	-51°099	-55°901			9	-38°942	-34°773			9	-29°370	-64°187		
	921					981					1041					1101			
12	+62°591	+16°166	65 1780	9°9	10	-51°096	-45°669	65 1789	9°9	9	-38°416	-23°207	65 1803	9°2	10	-29°305	-13°614	65 1804	9°4
10	+62°731	+7°276			11	-50°818	-33°001			9	-38°410	-0°320			10	-29°294	-3°100		
9	+62°790	+4°327			10	-50°117	-61°639			9	-38°334	-15°318			11	-29°284	-17°270		
9	+63°121	+47°203			77	-49°783	-10°014			10	-38°100	-22°547			9	-28°985	-36°821		
9	+63°722	+62°878			39	-49°650	-9°956			13	-38°081	-58°109			11	-28°783	-22°302		
10	+63°903	+43°109	65 1782	9°9	10	-49°734	-27°965	65 1797	9°5	9	-37°831	-19°024	65 1799	9°9	11	-28°762	-64°551	65 1805	9°5
33	+63°988	+20°605			32	-49°275	-53°781			9	-37°584	-47°449			9	-28°389	-4°378		
11	+64°422	+59°165			11	-48°884	-24°621			12	-37°517	-42°215			10	-28°173	-38°733		
13	+64°448	+32°467			9	-48°731	-0°985			9	-37°325	-11°210			10	-28°007	-21°208		
9	+64°587	+27°649			9	-48°681	-3°480			9	-37°250	-17°390			9	-27°605	-57°411		
	931					991					1051					1111			
10	+64°778	+6°686	65 1783	9°9	9	-48°615	-7°722	64 1797	9°5	11	-37°071	-31°071	65 1794	9°9	16	-27°515	-35°923	65 1806	9°6
9	+64°949	+37°974			10	-48°612	-11°254			9	-37°032	-33°053			9	-27°365	-22°979		
30	-64°712	-0°024			9	-48°330	-39°542			11	-36°895	-19°900			12	-27°255	-9°339		
11	-64°402	-4°162			9	-48°279	-20°923			12	-36°870	-17°475			10	-27°238	-12°810		
41	-63°978	-64°241			11	-48°241	-16°459			11	-36°742	-24°413			28	-27°149	-8°959		
30	-63°632	-34°903	65 1784	9°9	15	-48°057	-15°768	65 1801	9°9	14	-36°676	-22°523	65 1802	9°6	16	-27°075	-9°381	65 1803	9°2
13	-63°212	-44°746			16	-48°010	-23°305			9	-36°585	-42°576			10	-27°020	-2°578		
11	-62°785	-19°836			10	-47°870	-24°083			9	-36°483	-39°630			9	-27°011	-2°974		
10	-62°735	-44°945			11	-47°729	-37°968			13	-36°417	-27°156			13	-26°984	-45°607		
9	-62°430	-13°920			14	-47°723	-4°567			12	-36°400	-25°182			12	-26°833	-0°020		
	941					1001					1061					1121			
12	-61°695	-33°651	65 1785	9°9	9	-47°621	-12°846	65 1802	9°9	9	-35°815	-43°293	65 1804	9°4	12	-26°646	-43°512	65 1805	9°5
9	-61°436	-16°169			9	-47°540	-5°260			12	-35°584	-38°122			26	-26°602	-38°321		
11	-61°058	-39°993			9	-47°498	-8°518			12	-35°548	-19°758			12	-26°484	-2°928		
9	-60°903	-30°541			13	-47°376	-43°405			9	-35°491	-25°644			9	-26°461	-38°689		
9	-60°683	-60°259			13	-47°286	-5°518			10	-35°480	-10°944			9	-26°412	-60°510		
9	-60°624	-46°450	65 1786	9°9	11	-47°021	-61°287	65 1803	9°9	12	-35°381	-17°554	65 1804	9°9	9	-26°284	-42°271	65 1805	9°5
11	-60°555	-49°637			29	-46°287	-2°927			14	-34°857	-12°606			10	-26°232	-27°476		
11	-60°295	-17°990			12	-45°832	-29°994			11	-34°680	-21°937			21	-26°168	-12°784		
9	-60°232	-14°374			9	-45°700	-21°909			11	-34°471	-18°015			10	-26°076	-43°079		
15	-59°458	-30°233			9	-45°252	-16°819			15	-34°402	-30°003			9	-25°768	-55°203		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1131					1191					1251					1311			
12	-25°21.0	-46°48.7			24	-15°9.74	-40°32.0	65 1811	9.7	12	-7°85.1	-15°26.0			11	-0°55.1	-19°17.4		
10	-24°48.3	-5°7.00			11	-15°79.5	-27°75.6			9	-7°82.4	-19°40.6			10	-0°50.3	-29°05.8		
9	-24°00.0	-57°00.5			12	-15°59.0	-30°58.4			9	-7°75.0	-2°10.6			9	-0°50.0	-49°53.4		
16	-24°55.5	-0°28.0	65 1806	9.9	10	-15°49.4	-54°30.2			10	-7°70.4	-5°46.5			9	-0°50.7	-5°50.7		
9	-24°52.4	-42°08.2			9	-15°38.5	-43°71.3			13	-7°68.2	-27°33.2			9	-1°39.1	-29°64.0		
10	-24°24.9	-65°7.20			12	-15°24.2	-25°9.19			9	-7°43.0	-13°30.0			10	-1°40.8	-48°43.2		
24	-24°21.5	-30°7.25	65 1807	9.5	9	-15°22.2	-19°09.3			10	-7°13.5	-47°46.7			12	-1°09.4	-53°64.0		
10	-23°04.9	-5°35.8			9	-15°17.0	-5°69.6			9	-6°95.2	-6°70.0			27	-1°74.2	-0°75.8	64 1828	9.5
10	-23°94.2	-29°05.2			10	-14°86.7	-2°20.2			11	-6°81.1	-59°46.4			12	-1°94.2	-4°67.6		
11	-23°88.8	-47°7.70			14	-14°84.2	-20°9.10			12	-6°64.1	-2°03.7			12	-2°20.4	-50°7.29		
	1141					1201					1261					1321			
13	-23°82.2	-50°2.71			10	-14°70.5	-40°06.8			43	-6°54.6	-3°88.5	64 1823	5.2	9	-2°30.0	-35°85.9		
13	-23°48.5	-56°10.9			12	-14°58.9	-37°36.3			11	-5°92.6	-23°20.1			10	-2°47.4	-53°42.5		
9	-23°47.3	-50°03.3			9	-14°40.3	-16°59.7			14	-5°88.6	-35°40.9			12	-2°51.2	-56°00.3		
12	-23°32.6	-15°44.7			12	-14°48.4	-14°20.3			12	-5°63.6	-61°27.7			11	-2°73.4	-15°37.5		
11	-23°24.0	-60°21.2			10	-14°40.2	-45°69.4			9	-5°60.0	-17°49.2			9	-3°12.8	-48°83.0		
9	-23°21.2	-31°51.9			11	-14°37.5	-38°87.1			9	-5°21.2	-38°82.7			12	-3°20.1	-25°81.0		
9	-23°19.0	-47°15.7			12	-14°01.7	-44°28.7			9	-5°18.7	-58°71.9			25	-3°42.8	-27°25.8	65 1823	9.2
10	-23°15.3	-0°81.7			12	-13°92.0	-41°32.3			9	-5°09.7	-7°43.0			9	-3°04.0	-3°19.6		
16	-22°53.1	-38°7.73	65 1808	9.0	9	-13°90.1	-36°76.7			9	-4°95.7	-14°66.3			9	-3°08.1	-46°29.4		
9	-22°53.0	-40°01.0			24	-13°89.1	-41°22.5	65 1812	5.5	9	-4°91.3	-58°56.6			9	-3°02.0	-48°32.4		
	1151					1211					1271					1331			
10	-22°44.7	-9°44.4			12	-13°79.9	-21°82.6			9	-4°89.3	-7°21.2			11	-4°07.1	-36°47.9		
9	-22°31.4	-29°01.5			10	-13°70.9	-44°89.2			12	-4°84.8	-2°58.2			9	-4°12.0	-36°92.7		
9	-22°20.9	-1°30.4			12	-13°47.1	-35°31.0			9	-4°74.9	-39°97.5			9	-4°25.5	-5°90.1		
9	-22°20.0	-30°50.3			15	-13°40.1	-0°73.0			9	-4°70.4	-40°81.6			12	-4°33.8	-12°42.9		
12	-21°50.1	-27°58.9			10	-13°28.4	-29°95.9			10	-4°66.3	-32°15.5			10	-4°19.0	-3°01.6		
11	-21°05.8	-20°58.7			11	-12°67.2	-13°27.5			11	-4°53.0	-25°74.4			10	-4°17.9	-0°45.5		
9	-21°48.8	-5°10.5			10	-12°54.3	-1°07.2			12	-4°52.8	-15°88.7			14	-4°09.3	-44°88.0	65 1824	9.9
9	-21°35.5	-5°58.3			9	-12°40.7	-36°20.7			12	-4°14.4	-5°25.6			10	-5°02.2	-19°02.8		
24	-21°29.0	-14°71.0	65 1809	9.9	9	-12°33.4	-37°17.7			10	-4°11.1	-49°90.9			12	-5°03.5	-8°62.7		
9	-21°20.3	-50°10.0			14	-12°17.5	-36°72.6			14	-4°08.5	-12°97.3			12	-5°55.1	-49°04.4		
	1161					1221					1281					1341			
9	-21°13.4	-10°00.2			12	-12°08.9	-16°32.6			13	-3°91.2	-35°84.7			12	-5°91.2	-20°14.9		
13	-21°11.5	-10°57.7			9	-11°87.5	-25°18.9			12	-3°62.4	-6°68.6			19	-5°03.0	-13°83.2	65 1825	9.9
11	-21°11.6	-15°12.0			9	-11°69.8	-55°42.1			12	-3°57.8	-20°49.2			10	-0°34.3	-42°80.8		
12	-20°93.0	-14°77.4			15	-11°60.6	-11°68.3			11	-3°38.9	-28°27.2			12	-0°37.5	-26°82.6		
9	-20°83.2	-20°17.2			13	-11°40.4	-27°35.5	65 1813	9.0	10	-3°29.1	-41°83.2			45	-0°45.1	-9°15.3	65 1826	8.8
12	-20°82.2	-30°74.5			12	-11°07.5	-1°13.0			9	-3°16.4	-42°55.2			9	-0°68.4	-27°82.1		
9	-20°26.8	-13°30.8			11	-11°01.5	-41°81.5			14	-3°11.7	-10°07.8			9	-0°82.6	-10°96.7		
10	-20°25.3	-54°25.8			10	-10°87.6	-29°79.1			10	-2°91.9	-50°99.6			9	-0°91.0	-38°48.9		
11	-20°25.1	-18°08.2			9	-10°81.7	-56°86.3			10	-2°51.7	-17°13.3			10	-7°01.6	-10°91.0		
12	-20°07.5	-20°58.0			9	-10°74.3	-7°05.6			20	-2°43.7	-28°04.4	65 1816	9.4	12	-7°45.3	-9°80.0		
	1171					1231					1291					1351			
12	-19°84.9	-0°15.8			10	-10°68.0	-13°53.9			12	-2°32.3	-54°38.8			9	-7°05.0	-11°00.5		
12	-19°81.5	-32°44.0			9	-10°39.7	-45°45.4			10	-2°31.6	-12°29.8			11	-8°04.5	-64°92.5		
10	-19°75.7	-12°14.3			11	-10°02.3	-61°75.9			9	-2°03.6	-34°14.1			9	-8°14.7	-32°59.8		
12	-19°52.2	-30°18.0			10	-9°97.3	-14°66.9	65 1814	9.9	9	-1°83.0	-42°50.5			9	-8°17.5	-46°36.8		
11	-19°01.2	-29°58.5			12	-9°89.3	-16°57.4			12	-1°70.2	-58°44.5			9	-8°18.5	-7°76.3		
15	-19°01.0	-40°14.8			11	-9°73.8	-14°26.1			9	-1°67.8	-46°77.6			9	-8°19.5	-48°47.3		
9	-18°93.5	-32°20.1			9	-9°73.4	-5°47.6			12	-1°38.1	-54°72.0			12	-8°00.8	-37°17.1		
9	-18°75.4	-18°52.5			22	-9°59.9	-5°02.7	64 1819	9.9	9	-1°35.1	-25°56.4			9	-8°07.3	-0°18.2		
12	-18°73.6	-39°57.3			10	-9°54.8	-5°62.4			13	-1°34.2	-60°35.1			10	-8°09.5	-31°01.9		
9	-18°65.0	-9°07.0			12	-9°36.9	-35°52.3			15	-1°14.6	-36°15.5	65 1817	9.9	9	-9°25.3	-28°25.2		
	1181					1241					1301					1361			
10	-18°57.2	-27°49.1			10	-9°30.3	-45°74.9			11	-0°86.0	-35°34.3			10	-9°44.0	-56°84.0		
12	-18°55.5	-48°19.8			14	-8°73.1	-58°35.4	65 1815	9.9	12	-0°84.1	-30°66.7			9	-9°50.2	-56°81.3		
14	-18°24.1	-31°28.4			10	-8°49.5	-18°37.9			23	-0°81.6	-35°60.9	65 1818	9.5	29	-9°67.0	-11°21.8	65 1827	9.4
9	-18°11.4	-55°58.0			9	-8°47.9	-64°56.5			58	-0°56.4	-60°23.6	65 1819	7.2	10	-10°02.8	-36°13.5		
24	-17°89.8	-34°87.8	65 1810	9.4	11	-8°37.6	-32°91.2			12	-0°32.2	-1°80.0			9	-10°14.8	-36°30.5		
11	-17°75.2	-7°91.8			14	-8°30.9	-15°88.5			9	+0°03.0	-37°02.1			9	-10°29.9	-52°16.1		
12	-17°53.9	-61°30.0			28	-8°27.8	-6°91.0	64 1821	9.4	11	+0°20.2	-38°56.0			14	-10°01.1	-31°62.3		
10	-17°35.2	-17°59.5			9	-8°19.1	-2°42.3			10	+0°31.5	-54°68.1			24	-11°04.9	-15°54.4	65 1828	9.8
10	-17°15.3	-18°09.1			9	-8°14.0	-48°91.6			56	+0°85.0	-58°78.1	65 1820	7.3	37	+11°05.3	-6°85.0	64 1837	7.9
16	-16°51.8	-2°78.1	64 1814	9.9	9	-7°88.7	-60°74.1			32	+0°41.2	-28°32.8	65 1821	9.2	15	+11°07.9	-27°60.3		

[illegible]

C.P.D.				C.P.D.				C.P.D.				C.P.D.								
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	
	1611,				PLATE CENTRE. 12 ^h 27 ^m , - 65°. Plate 1537. 1896, June 8. PROVISIONAL CONSTANTS. <i>a</i> = - .01146 <i>d</i> = - .00109 <i>b</i> = + .00126 <i>e</i> = - .01118 <i>c</i> = - .0287 <i>f</i> = + .0809 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$												111,			
10	+53.573	-50.681			10	-54.906	+3.878			10	-44.394	+38.253			10	-44.394	+38.253			
10	+53.715	-58.980			9	-54.680	+43.280			9	-44.230	+24.973			9	-44.230	+24.973			
10	+53.801	-57.318			9	-54.053	+16.321			11	-43.935	+22.899			11	-43.935	+22.899			
9	+53.850	-5.748			10	-53.910	+13.992			9	-43.584	+45.930			9	-43.584	+45.930			
9	+53.954	-12.765			9	-53.367	+32.711			9	-43.283	+57.062			9	-43.283	+57.062			
9	+53.976	-2.289			9	-53.358	+40.113			9	-43.254	+42.082			9	-43.254	+42.082			
31	+54.021	-18.196	65 1851	9.5	9	-53.277	+7.455			9	-43.250	+22.935	64 1910	10.0	9	-43.250	+22.935			
10	+54.043	-9.617			9	-53.246	+38.241			9	-43.170	+19.681			9	-43.170	+19.681			
34	+54.232	-61.089	65 1853	9.7	13	-53.237	+51.767	63 2264	9.9	9	-43.038	+21.961			9	-43.038	+21.961			
40	+54.460	-33.691	65 1852	8.8	9	-53.067	+58.900			15	-42.403	+13.042	64 1911	9.5	9	-42.403	+13.042			
	1621					61					121									
9	+54.637	-18.163			16	-52.974	+20.849	64 1894	9.9	9	-42.243	+31.708			9	-42.243	+31.708			
11	+55.230	-3.219			9	-52.899	+27.902			9	-41.857	+33.613			9	-41.857	+33.613			
9	+55.248	-7.416			18	-52.876	+40.027			9	-41.654	+20.599	64 1912	10.0	9	-41.654	+20.599			
9	+56.209	-47.726			9	-63.518	+10.900			20	-52.218	+36.223	64 1895	8.8	9	-41.502	+7.203			
9	+56.411	-9.730			9	-63.403	+36.974			9	-52.170	+55.929			9	-41.441	+62.684			
33	+57.084	-19.477	65 1855	9.2	9	-63.387	+43.785			11	-52.130	+36.011			9	-41.440	+51.228			
13	+57.104	-16.979			10	-63.362	+43.320			10	-51.962	+36.735			9	-41.355	+63.654			
29	+57.175	-22.921	65 1856	9.9	11	-63.291	+63.205			14	-51.846	+20.092			9	-41.075	+7.528			
9	+57.220	-4.415			25	-63.218	+5.846	64 1883	7.9	9	-51.616	+41.690			9	-41.049	+44.845			
15	+57.245	-5.041			30	-63.045	+48.706	64 1886	8.3	9	-51.568	+39.835			9	-41.023	+26.026			
	1631					11					71					131				
12	+57.354	-16.433			16	-62.917	+21.323	64 1885	9.9	9	-51.302	+19.279			18	-40.835	+31.586	64 1914	9.2	
10	+57.460	-19.321			10	-62.748	+12.836			11	-51.189	+28.710	64 1896	9.9	9	-40.303	+28.202			
10	+58.365	-7.064			9	-62.142	+23.637			9	-51.168	+44.460			9	-39.985	+7.999			
9	+58.573	-7.358			9	-62.077	+22.127			11	-51.168	+37.161			9	-39.344	+29.823			
33	+58.621	-10.575	65 1857	9.3	9	-62.003	+45.376			10	-51.036	+23.275			9	-39.156	+13.157			
9	+58.773	-59.441			9	-61.842	+43.692			9	-51.001	+29.950			9	-39.020	+17.293	64 1916	10.0	
12	+59.109	-27.617			18	-61.795	+28.308	64 1887	9.4	10	-50.977	+20.659			23	-38.377	+15.595	64 1917	8.9	
9	+59.294	-0.899			9	-61.647	+49.055			11	-50.763	+31.184			9	-38.320	+35.593			
12	+59.332	-19.031			11	-60.978	+63.843			10	-50.703	+45.135			9	-38.093	+59.734			
9	+59.639	-0.784			9	-60.783	+29.479			9	-50.476	+14.130			11	-37.087	+40.916	64 1918	9.6	
	1641					21					81					141				
9	+59.659	-19.884			12	-60.724	+61.694	63 2256	9.9	9	-50.387	+6.215			9	-36.492	+11.589			
9	+59.680	-49.456			9	-60.562	+25.034			10	-50.266	+52.409			9	-36.440	+19.801			
51	+59.715	-35.066	65 1858	9.0	11	-60.492	+13.192	64 1888	9.6	18	-49.895	+35.208	64 1899	9.0	9	-35.802	+45.948			
9	+60.038	-22.723			11	-60.442	+13.389			13	-49.796	+44.820	64 1902	9.9	16	-35.684	+41.650	64 1919	9.2	
9	+60.290	-23.416			9	-60.338	+58.157			40	-49.654	+19.941	64 1898	7.2	9	-34.838	+27.097	64 1920	10.0	
10	+60.405	-17.634			9	-60.138	+32.471			9	-49.605	+58.571			9	-33.480	+34.467	64 1922	10.0	
10	+60.434	-35.104			11	-59.993	+52.137	63 2257	9.9	9	-49.504	+46.322			9	-32.915	+29.214			
9	+60.542	-6.736			9	-59.947	+57.529			18	-49.382	+27.401	64 1900	9.2	9	-32.635	+35.652			
9	+61.076	-27.052			9	-59.544	+52.316			19	-49.066	+20.592	64 1901	9.2	20	-32.315	+58.807	63 2291	8.9	
10	+61.515	-17.145			24	-59.438	+39.935	64 1889	8.5	10	-49.034	+31.836			9	-32.291	+47.200			
	1651					31					91					151				
9	+61.539	-60.227			16	-58.759	+27.026	64 1890	9.9	9	-48.578	+1.636			9	-31.856	+35.485			
10	+61.784	-4.175			9	-58.561	+60.563			10	-48.283	+37.034			10	-31.824	+41.207	64 1924	9.6	
11	+61.789	-10.667			10	-58.383	+49.898			9	-48.262	+25.804			9	-31.746	+41.230			
11	+61.998	-20.448			15	-58.328	+38.097	64 1891	9.8	14	-48.219	+49.096	64 1906	9.9	11	-31.536	+10.882	64 1923	9.5	
9	+62.772	-20.856			10	-58.274	+41.130			21	-47.840	+25.858	64 1904	8.8	9	-31.406	+13.818			
11	+63.244	-20.842			10	-58.221	+56.289			19	-47.772	+30.753	64 1905	9.1	9	-30.508	+39.079			
9	+63.521	-14.745			9	-58.167	+37.445			13	-47.280	+45.895	64 1908	9.9	9	-29.882	+22.574			
12	+63.664	-24.546			9	-57.637	+27.356			9	-47.231	+12.904			9	-29.372	+47.726			
10	+63.861	-13.333			9	-57.601	+26.106			10	-47.157	+19.918			9	-29.219	+39.026	64 1925	10.0	
9	+63.863	-14.512			13	-57.378	+53.413	63 2262	9.9	18	-46.940	+53.979	63 2268	9.8	9	-29.194	+36.100			
	1661					41					101					161				
9	+63.959	-16.859			9	-57.131	+26.347			13	-46.855	+19.427	64 1907	9.9	9	-29.104	+62.696			
11	+64.091	-14.029			10	-57.073	+22.442			10	-46.842	+34.421			15	-28.919	+50.857	64 1926	9.5	
11	+64.670	-4.024			14	-56.622	+38.949	64 1893	9.9	14	-46.543	+55.493			9	-27.956	+46.675			
12	+64.881	-20.732			11	-56.518	+41.360			10	-46.317	+18.591			9	-27.803	+31.757			
					12	-56.317	+11.307			9	-45.800	+50.643			15	-27.264	+21.086	64 1927	9.4	
					10	-56.295	+62.974			9	-45.658	+30.073			12	-26.462	+28.987	64 1929	9.7	
					9	-56.100	+35.756			10	-45.247	+61.048			18	-26.454	+28.352	64 1928	9.2	
					16	-55.918	+19.823	64 1892	9.8	14	-45.150	+55.417			16	-26.293	+46.017	64 1930	9.4	
					9	-55.742	+47.294			9	-45.096	+61.912			9	-25.952	+63.742			
					10	-55.322	+59.323			12	-44.833	+42.447	64 1909	9.9	9	-25.630	+55.462			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
15	171, -25°560	+40°714	64 1931	9.3	10	231, -0°017	+3°797	64 1958	9.7	10	291, +38°113	+64°585	63 2375	10.0	9	351, -50°579	-7°149	65 1857	9.3
9	-25°526	+46°116			9	+0°245	+39°769			9	+38°815	+32°544			15	-56°037	-10°642		
9	-24°799	+20°692	64 1932	9.9	9	+0°802	+31°215			15	+39°160	+24°485	64 1975	9.6	11	-54°700	-19°009		
10	-24°632	+38°355	64 1933	9.9	11	+1°855	+61°343	63 2337	9.8	9	+41°384	+0°775			11	-54°366	-27°591		
10	-24°230	+25°512	64 1934	9.8	9	+2°053	+47°012			9	+41°556	+38°683			9	-53°779	-17°548		
19	-23°723	+38°352	64 1935	8.8	9	+2°296	+52°723			9	+41°987	+62°059			9	-53°483	-23°320		
9	-22°859	+32°178	64 1936	10.0	20	+2°511	+45°860	64 1959	9.0	9	+42°376	+32°578			9	-53°393	-4°034		
10	-22°187	+34°874	64 1937	9.7	16	+2°592	+57°829	63 2338	9.3*	9	+42°801	+41°398			20	-53°229	-34°989	65 1858	9.0
9	-20°095	+43°805			9	+2°860	+54°311			12	+43°799	+23°856	64 1976	9.7	10	-52°897	-10°496		
10	-19°750	+45°348	64 1939	10.0	9	+2°985	+45°168			9	+44°685	+2°802			9	-52°716	-16°981		
10	181 -19°384	+23°792	64 1938	9.9	18	+2°994	+53°194	63 2339	9.3	10	+45°860	+0°445	64 1977	10.0	9	-52°497	-34°975		
11	-19°382	+45°258	64 1940	9.6	9	+4°000	+56°699			9	+46°943	+15°108			9	-52°445	-26°882		
9	-19°333	+37°555			9	+4°268	+54°560			9	+47°033	+28°724			9	-52°412	-59°353		
9	-19°192	+45°578			10	+5°081	+43°707	64 1961	9.9	9	+47°886	+3°529			9	-52°215	-49°348		
10	-19°042	+45°710	64 1941	9.6	9	+5°969	+15°392	64 1962	9.6	9	+48°983	+40°932			9	-51°983	-20°239		
9	-18°850	+35°418			9	+6°464	+63°447			9	+49°185	+12°992			9	-51°193	-20°588		
9	-18°481	+48°286			9	+6°478	+63°521			9	+50°190	+43°936			9	-50°709	-20°535		
28	-18°148	+44°799	64 1943	8.9	15	+9°405	+62°157	63 2345	9.5	11	+50°329	+1°945	64 1980	9.5	10	-50°647	-13°008		
31	-18.144	+46.096	64 1942	8.8	11	+10°065	+56°472	63 2346	9.6	18	+50°496	+54°748	63 2387	9.4	10	-50°518	-3°677		
9	-18°104	+45°458			10	+10°127	+58°664			12	+50°876	+41°622	64 1979	9.8	10	-50°363	-13°690		
9	191 -17°834	+48°834			11	+10°426	+47°321	64 1963	9.7	9	+51°237	+31°856			10	-50°032	-24°208		
10	-17°828	+46°345	64 1944	9.6	9	+11°049	+64°792			17	+54°523	+60°306	63 2391	9.3	11	-50°030	-1°439		
9	-17°760	+53°370			9	+11°643	+10°300	64 1964	10.0	11	+54°770	+55°043	63 2392	9.7	10	-49°996	-0°555		
9	-17°684	+46°202			9	+12°532	+35°887			9	+56°164	+2°720			9	-49°585	-59°963		
9	-17°407	+48°245			9	+12°672	+43°877			9	+56°338	+6°107			15	-49°569	-6°629	64 1897	9.7
17	-17°174	+42°704	64 1945	9.2	17	+14°149	+61°607	63 2348	9.2	10	+57°075	+36°478	64 1981	10.0	10	-49°114	-20°312		
10	-17°128	+54°419	63 2313	10.0	9	+14°534	+58°451			9	+57°777	+38°084			10	-49°042	-12°269		
9	-17°096	+46°537			9	+15°446	+63°329	63 2351	9.2	15	+57°790	+48°211	64 1982	9.5	21	-48.916	-18.990	65 1859	8.7
9	-16°719	+63°238			11	+15°809	+61°819	63 2352	9.9	9	+58°407	+34°224			9	-48°603	-0°515		
9	-16°570	+35°699			12	+16°394	+62°089	63 2354	9.8	32	+59.265	+48.702	64 1983	8.0	11	-48°474	-8°777		
9	201 -16°517	+39°969			9	+16°722	+42°279	64 1965	10.0	9	+60°987	+34°075			10	-48°328	-12°802		
16	-16°076	+45°918	64 1946	9.2	9	+17°127	+14°844			10	+61°380	+38°957	64 1984	10.0	9	-48°003	-1°483		
9	-15°228	+45°310	64 1947	10.0	24	+18.565	+16.420	64 1966	8.9	9	+61°916	+4°158			12	-47°938	-27°493		
9	-14°479	+46°710			9	+19°406	+38°046			9	+62°313	+25°558			12	-47°909	-10°112		
10	-13°547	+53°903	63 2317	9.6	10	+19°450	+46°260	64 1967	10.0	10	+62°505	+14°399	64 1985	10.0	18	-47°818	-29°443	65 1860	9.1
9	-13°524	+58°506			9	+19°743	+22°751			26	-64°932	-9°715	64 1881	8.4	27	-47°780	-9°004	64 1903	8.8
16	-13°322	+59°316	63 2318	9.5	17	+19°766	+63°489	63 2358	9.4	15	-64°740	-8°157	64 1882	9.9	9	-47°322	-13°828		
9	-12°421	+59°951			9	+22°835	+49°111			11	-64°660	-14°430			9	-47°244	-7°961		
15	-12°392	+64°932	63 2319	9.6	10	+23°340	+27°791			9	-64°506	-30°720			9	-47°173	-2°433		
9	-11°783	+58°149			10	+24°197	+56°047	63 2364	10.0	10	-63°041	-22°834			9	-46°412	-21°797		
10	211 -11°636	+39°354	64 1949	9.6	9	+24°583	+49°386			11	-62°822	-24°377			35	-46°322	-13°714	65 1862	7.1
11	-11°247	+3°403	64 1948	9.5	17	+25°113	+60°115	63 2365	9.3	12	-62°581	-0°348			10	-46°274	-18°214		
9	-10°894	+38°513			9	+25°114	+30°342			11	-62°059	-41°070			12	-46°028	-6°517		
9	-9°660	+52°633			12	+26°685	+47°820	64 1969	9.6	13	-61°837	-62°211	65 1849	9.9	15	-45°835	-47°373	65 1861	9.9
9	-9°622	+34°022			17	+26°694	+63°592	63 2369	9.3	10	-60°710	-42°336			9	-45°647	-7°770		
9	-8°568	+49°283			15	+27°726	+62°511	63 2371	9.4	9	-60°707	-10°018			12	-45°126	-28°229		
12	-8°303	+40°636	64 1951	9.4	9	+28°051	+41°122	64 1970	10.0	14	-60°347	-29°193	65 1850	9.9	16	-45°093	-17°121	65 1863	9.3
15	-7°865	+62°823	63 2324	9.5	9	+29°131	+35°898			14	-60°091	-18°573	65 1851	9.5	12	-45°004	-20°713		
10	-7°594	+60°656	63 2325	10.0	10	+29°313	+28°027	64 1971	10.0	10	-59°988	-3°542			10	-44°681	-44°665		
9	-6°159	+21°574	64 1952	10.0	10	+29°802	+57°796			24	-58°554	-34°003	65 1852	8.8	10	-44°381	-28°290		
12	221 -5°381	+44°734	64 1953	9.5	9	+29°958	+31°313			9	-58°214	-51°000			15	-43°641	-24°249	65 1864	9.5
10	-5°187	+54°853	63 2328	10.0	10	+33°668	+59°672	63 2373	10.0	12	-57°847	-5°212			11	-42°886	-17°014		
10	-4°657	+30°729	64 1954	9.6	10	+33°896	+15°143	64 1972	9.8	9	-57°504	-57°602			9	-42°708	-57°900		
10	-3°125	+0°506	64 1955	9.6	9	+35°039	+30°690			9	-57°485	-59°252			19	-42°429	-10°705	65 1866	8.6
9	-2°753	+43°358			9	+35°485	+28°395			12	-57°122	-17°131			14	-42°339	-36°148	65 1865	9.9
10	-2°520	+20°049	64 1956	9.6	18	+35°509	+11°986	64 1973	9.2	19	-56°960	-19°619	65 1855	9.2	11	-41°872	-14°356	65 1867	9.5
9	-2°022	+37°327	64 1957	10.0	11	+36°733	+64°116	63 2374	9.7	12	-56°901	-16°566			10	-41°119	-28°130		
9	-1°440	+51°549			9	+36°858	+0°728			15	-56°819	-61°323	65 1853	9.7	12	-40°403	-1°225	64 1913	9.6
9	-0°927	+38°172			10	+37°558	+46°877	64 1974	10.0	13	-56°621	-23°049	65 1856	9.9	9	-40°026	-32°338		
10	-0°821	+64°483			9	+37°961	+6°574			9	-56°600	-19°444			12	-39°944	-1°678	64 1915	9.7

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,					531,					591,			
9	-39°416	-53°458			13	-5°650	-63°474	65 1895	9°7	9	+29°659	-61°497			9	+45°464	-56°318		
12	-38°490	-57°815	65 1868	9°9	16	-3°612	-53°463	65 1896	9°4	9	+29°988	-55°784			9	+45°818	-45°491		
10	-38°426	-54°679			11	-3°448	-47°494	65 1897	9°6	12	+31°110	-61°712	65 1923	10°0	9	+45°826	-36°142		
9	-36°970	-0°680			13	-3°432	-56°721	65 1898	9°6	11	+31°133	-24°161	65 1922	10°0	15	+46°617	-53°462	65 1947	9°5
9	-36°850	-0°127			9	-2°469	-57°259			15	+32°760	-39°729	65 1925	9°4	9	+46°782	-56°390		
10	-36°312	-48°769			10	-1°476	-64°917			15	+32°792	-19°813	65 1924	9°4	21	+47°192	-19°696	65 1946	8°9
9	-36°262	-60°351			9	-1°031	-55°179			12	+33°660	-58°035	65 1927	9°6	9	+47°265	-54°730		
9	-36°258	-53°780			9	-0°608	-44°576			9	+33°886	-32°698			12	+47°661	-7°693	64 1978	9°9
9	-36°235	-56°123			12	+0°070	-63°639	65 1899	10°0	11	+34°274	-63°860			10	+47°823	-20°752		
12	-35°912	-37°400	65 1869	9°6	21	+0°638	-50°135	65 1900	9°2	26	+34°316	-17°646	65 1926	8°4	12	+48°333	-54°879	65 1948	9°7
	421					481					541					601			
19	-35°745	-16°718	65 1871	9°1	21	+0°709	-40°809	65 1901	9°2	9	+34°605	-21°839			9	+48°929	-19°590		
9	-35°615	-37°260	65 1870	10°0	10	+1°419	-9°177	65 1902	9°6	9	+34°712	-38°691			10	+49°086	-50°078	65 1949	10°0
9	-34°788	-47°953			9	+1°490	-13°760			10	+34°863	-25°291			11	+49°841	-46°036	65 1950	10°0
11	-34°457	-24°569	65 1872	9°6	12	+2°555	-41°678	65 1904	9°6	9	+34°953	-50°449			9	+50°544	-0°743		
24	-34°196	-28°774	65 1873	8°7	9	+4°673	-29°258			11	+35°304	-15°340	65 1928	10°0	9	+51°224	-40°896		
9	-33°890	-1°396	64 1921	10°0	9	+4°858	-56°424			9	+36°456	-49°530			9	+51°584	-17°929		
17	-33°473	-42°933	65 1874	9°1	36	+5°013	-34°381	65 1905	8°0	9	+36°915	-34°167			9	+51°710	-54°269		
12	-32°785	-46°005	65 1875	9°7	12	+5°069	-6°316	64 1960	9°5	11	+36°974	-61°266	65 1929	10°0	13	+51°773	-53°286	65 1952	9°5
11	-32°522	-23°996	65 1878	9°9	9	+5°093	-64°046			9	+37°633	-51°382			9	+52°080	-45°943		
12	-32°374	-54°293	65 1877	9°7	11	+5°405	-9°027	65 1906	9°5	11	+37°828	-64°823	65 1931	9°9	9	+52°332	-28°098		
	431					491					551					611			
9	-29°749	-0°138			9	+5°598	-37°082			9	+38°063	-39°995			12	+52°368	-14°191	65 1951	9°3
9	-29°428	-41°587			9	+6°477	-18°181			9	+38°189	-58°284			9	+52°438	-14°203		
12	-27°243	-49°129	65 1879	10°0	9	+8°333	-17°204	65 1907	10°0	11	+38°274	-47°818			9	+52°830	-63°913		
9	-25°484	-46°931			9	+8°974	-50°349			12	+38°325	-43°470	65 1930	9°9	9	+54°021	-37°853		
13	-24°066	-41°489	65 1880	9°4	9	+9°452	-13°192			11	+39°017	-33°644			9	+54°024	-49°347		
9	-23°688	-46°264			9	+9°905	-56°565			12	+39°393	-19°090	65 1932	9°7	9	+54°070	-30°784		
9	-22°568	-42°246			14	+11°273	-24°322	65 1908	9°2	10	+39°421	-56°090	65 1933	10°0	9	+54°079	-23°718		
9	-21°610	-63°656			11	+11°401	-26°854	65 1909	9°6	9	+39°719	-40°732			9	+54°244	-15°115		
9	-20°915	-0°490			10	+11°849	-38°325			11	+39°792	-36°341			15	+54°873	-21°660	65 1953	9°2
12	-19°871	-45°643	65 1881	9°7	9	+14°215	-26°324	65 1910	10°0	16	+39°793	-54°054	65 1934	9°2	9	+54°908	-6°526		
	441					501					561					621			
9	-19°087	-41°854			12	+14°462	-57°801	65 1911	9°9	9	+39°915	-23°524			9	+55°105	-16°027		
25	-18°751	-63°668	65 1882	9°0	10	+15°142	-23°727	65 1912	10°0	9	+40°132	-27°227			9	+55°363	-50°189		
9	-17°266	-0°400			9	+15°284	-40°421			9	+40°450	-19°228			10	+55°638	-21°885		
11	-16°388	-44°010	65 1883	9°8	9	+15°329	-54°159			9	+40°837	-31°692			10	+56°258	-39°019		
10	-15°756	-59°480			10	+15°820	-43°611			12	+40°854	-21°610	65 1935	10°0	9	+56°514	-39°437		
9	-15°707	-12°717	65 1884	9°8	9	+16°289	-39°232			9	+41°028	-43°672			9	+56°658	-63°073	65 1956	9°8
9	-15°629	-63°893			9	+17°437	-53°396			12	+41°168	-37°113	65 1937	10°0	9	+57°515	-56°067		
10	-15°507	-49°531			9	+17°456	-48°318			9	+41°436	-54°429			9	+58°081	-31°052		
10	-15°085	-44°221			11	+19°197	-47°469			9	+41°559	-2°343			9	+58°764	-23°736		
9	-14°159	-44°846			9	+19°267	-43°569			23	+41°677	-10°304	65 1936	8°7	10	+58°815	-60°243	65 1960	9°9
	451					511					571					631			
13	-13°739	-51°300	65 1885	9°6	10	+20°505	-24°465			10	+41°732	-18°158			13	+59°085	-22°882	65 1959	9°4
13	-13°637	-48°993	65 1886	9°5	14	+21°018	-54°509	65 1914	9°5	9	+41°922	-5°475			9	+59°168	-19°769		
11	-12°001	-52°816			15	+21°177	-44°836	65 1915	9°4	9	+41°925	-23°813			11	+60°135	-34°217		
9	-11°701	-24°526			11	+21°413	-36°373			18	+42°179	-30°908	65 1938	9°2	9	+60°196	-4°582		
9	-10°485	-62°362			9	+22°506	-31°884			9	+42°597	-26°366			13	+60°241	-54°790	65 1963	9°5
9	-10°160	-40°417			9	+23°094	-14°438			9	+43°054	-21°387			12	+60°393	-19°889	65 1961	9°8
18	-10°089	-6°424	64 1950	9°2	9	+23°273	-26°506			11	+43°206	-38°145			11	+60°739	-48°873	65 1964	10°0
16	-9°640	-59°810	65 1887	9°3	10	+23°732	-28°501			34	+43°429	-58°986	65 1941	6°8	10	+60°942	-26°434	65 1962	10°0
20	-8°291	-50°801	65 1889	9°1	12	+24°015	-38°905	65 1916	10°0	12	+43°567	-56°850	65 1942	9°6	28	+60°994	-56°379	65 1966	7°6
12	-8°250	-63°991	65 1888	9°7	21	+24°599	-31°166	65 1917	9°0	12	+43°750	-14°839	65 1939	9°8	9	+61°028	-47°552	65 1965	10°0
	461					521					581					641			
11	-8°203	-58°396			11	+24°634	-8°535	64 1968	10°0	10	+43°761	-5°293			9	+61°174	-47°605		
16	-8°166	-60°934	65 1890	9°2	12	+24°719	-60°163	65 1918	10°0	14	+43°912	-27°033	65 1940	9°3	9	+61°263	-13°518		
9	-8°002	-62°276	65 1891	10°0	9	+25°096	-33°991			9	+44°003	-61°435			9	+61°476	-6°310		
9	-7°650	-62°807			12	+25°639	-47°839			11	+44°246	-48°926	65 1943	10°0	11	+61°519	-59°851	65 1967	9°6
10	-7°262	-26°396	65 1892	9°8	13	+25°940	-37°889	65 1919	9°5	11	+44°559	-53°456	65 1944	9°9	9	+61°600	-48°681		
10	-7°080	-29°544			9	+26°659	-20°364			9	+44°669	-51°979			14	+62°638	-46°115	65 1969	9°4
9	-6°858	-24°757			12	+26°770	-39°614	65 1920	9°9	9	+45°034	-28°771			17	+62°733	-50°799	65 1970	9°1
11	-6°306	-47°121	65 1893	10°0	16	+27°465	-39°487	65 1921	9°4	12	+45°164	-33°233	65 1945	9°9	12	+63°068	-19°769	65 1968	9°9
9	-6°261	-55°547			9	+27°716	-22°397			9	+45°200	-23°010			12	+63°075	-50°879	65 1971	9°5
15	-6°109	-52°061	65 1894	9°5	10	+28°385	-31°569			9	+45°414	-30°066			9	+64°039	-17°844		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.								
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.					
	651,					PLATE CENTRE. 12^h 45^m, - 65°. Plate 977. 1894, May 30. PROVISIONAL CONSTANTS. $a = -0.01149, \quad d = +0.00054$ $b = -0.00040 \quad e = -0.01142$ $c = -0.0055 \quad f = -0.1411$ To obtain standard co-ordinates, $\xi \eta$, $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						51,					111,				
9	+64.100	- 9.166								18	-26.151	+52.442	64 2004	9.2	9	- 3.975	+57.854				
9	+64.193	-15.571								17	-26.002	+46.191	64 2005	9.3	9	- 3.942	+28.505				
10	+64.784	- 5.616								9	-25.501	+14.727			9	- 3.811	+43.382				
16	+64.836	- 8.889	64 1987	9.1						9	-24.947	+53.688			9	- 2.895	+27.115				
										13	-24.861	+18.512	64 2008	9.9	9	- 2.841	+42.603				
										28	-24.768	+ 3.593	64 2007	9.0	18	- 2.735	+13.288	64 2032	9.2		
										9	-24.749	+40.121			9	- 2.333	+13.608				
										14	-24.485	+56.772	63 2412	9.8	9	- 2.327	+31.484				
										9	-24.373	+42.655			9	- 2.260	+64.639				
										9	-22.711	+21.256			9	- 2.225	+14.170	64 2033	10.0		
											61					121					
										20	-22.557	+53.156	63 2413	9.2	9	- 2.095	+62.750				
										20	-21.616	+48.362	64 2012	9.2	9	- 1.851	+10.326				
										9	-21.367	+39.796			9	- 1.663	+ 2.371				
										9	-20.936	+ 0.041	64 2011	9.9	17	- 1.519	+28.742	64 2034	9.2		
										9	-20.526	+47.900			10	- 1.480	+49.888				
										12	-20.264	+50.918	64 2014	9.7	9	- 1.066	+57.630				
										20	-20.185	+41.819	64 2013	9.2	9	- 1.017	+10.602				
										9	-19.780	+20.742			9	- 0.767	+50.533				
										9	-19.552	+55.179			16	- 0.249	+11.093	64 2037	9.2		
										9	-19.191	+42.982			9	+ 0.510	+38.155				
											71					131					
										18	-18.566	+ 9.783	64 2016	9.2	23	+ 0.661	+38.036	64 2038	8.8		
										22	-18.528	+54.277	63 2415	8.9	9	+ 0.810	+ 3.383				
										9	-18.474	+52.490			9	+ 1.642	+17.061				
										9	-17.805	+26.811			9	+ 1.806	+40.757				
										9	-17.727	+39.801			15	+ 2.656	+ 0.941	64 2039	9.5		
										10	-16.371	+ 3.526	64 2017	9.8	9	+ 3.427	+46.241				
										9	-16.123	+15.525			9	+ 3.876	+34.105				
										18	-15.099	+47.445	64 2018	9.2	9	+ 4.056	+45.720				
										9	-14.249	+24.209			9	+ 4.129	+ 2.097				
										9	-14.229	+18.541			18	+ 4.252	+48.557	64 2040	9.2		
											81					141					
										9	-13.913	+16.489			9	+ 5.125	+51.448				
										9	-12.775	+ 3.776			17	+ 5.146	+37.081	64 2041	9.3		
										9	-12.652	+53.920			27	+ 5.556	+52.852	63 2433	8.6		
										9	-12.129	+42.231			13	+ 5.985	+40.349	64 2042	9.7		
										9	-12.117	+ 4.452			10	+ 6.401	+62.162	63 2434	10.0		
										16	-12.053	+ 3.550	64 2021	9.1	9	+ 6.648	+22.827				
										15	-11.996	+ 3.588			9	+ 7.813	+27.994				
										10	-11.258	+48.688			9	+ 7.927	+30.845	64 2043	10.0		
										9	-11.190	+ 2.574			9	+ 8.050	+34.331				
										9	-10.980	+29.252			9	+ 8.203	+62.129				
											91					151					
										9	-10.344	+ 9.499	64 2022	10.0	9	+ 8.408	+34.605	64 2044	10.0		
										18	-10.343	+63.321	63 2419	9.7	9	+ 8.743	+41.920				
										9	- 9.896	+47.943			18	+ 8.782	+35.069	64 2045	9.2		
										17	- 9.768	+ 2.933	64 2023	9.2	9	+ 9.153	+ 6.001				
										9	- 9.724	+26.858			9	+ 9.157	+63.858				
										9	- 8.601	+ 9.302	64 2024	10.0	10	+ 9.213	+31.805	64 2046	9.8		
										9	- 8.178	+ 1.008			17	+ 9.263	+11.235	64 2047	9.4		
										19	- 8.040	+28.061	64 2025	9.1	10	+ 9.370	+60.578				
										18	- 7.893	+42.036	64 2026	9.4	9	+ 9.663	+40.115				
										13	- 7.644	+56.331			10	+10.010	+54.671	63 2437	9.8		
											101					161					
										9	- 7.616	+54.618			20	+10.224	+11.391	64 2048	9.2		
										9	- 7.508	+64.899			16	+10.873	+42.121	64 2049	9.3		
										40	- 7.507	+56.666	63 2420	7.8	9	+11.080	+54.237				
										12	- 7.343	+35.246	64 2028	9.7	38	+11.283	+44.219	64 2050	8.2		
										18	- 7.286	+12.034	64 2027	9.2	12	+11.377	+36.611	64 2052	9.9		
										9	- 7.167	+17.427			10	+11.390	+50.031	64 2051	10.0		
										19	- 6.338	+60.135	63 2422	9.2	9	+11.542	+58.507				
										11	- 5.272	+13.747	64 2031	9.5	9	+13.344	+17.374				
										9	- 4.428	+ 4.585			9	+13.601	+31.427	64 2054	10.0		
										9	- 4.059	+24.730			27	+13.607	+45.587	64 2053	8.6		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
9	+13.846	+58.332			10	+37.241	+12.098	64 2081	10.0	12	+58.829	+50.251	64 2104	9.6	9	-46.048	-36.995		
10	+13.997	+29.392	64 2055	9.7	10	+37.548	+22.908			9	+59.398	+14.203			9	-45.910	-34.164		
17	+14.420	+4.403	64 2057	9.4	12	+37.698	+14.813	64 2082	10.0	9	+59.706	+36.899			9	-45.733	-50.129		
9	+15.346	+33.013			9	+37.832	+54.093			20	+60.208	+55.010	63 2475	8.8	11	-44.923	-50.918		
10	+15.790	+6.422	64 2059	10.0	9	+37.921	+37.768			12	+60.299	+5.442	64 2108	9.9	14	-44.857	-20.077	65 1980	9.5
9	+16.115	+9.971			13	+38.265	+56.409	63 2456	9.5	9	+60.320	+27.785			9	-44.628	-44.456		
9	+16.565	+0.671			9	+38.268	+33.879			9	+60.413	+4.855			9	-43.877	-40.737		
9	+16.612	+64.928			9	+38.333	+12.103			17	+61.148	+33.259	64 2107	9.3	9	-43.872	-44.253		
10	+17.323	+22.936	64 2060	10.0	11	+38.862	+52.615	63 2457	9.9	12	+62.314	+7.901			18	-41.496	-32.152	65 1981	9.2
9	+17.765	+16.599			11	+38.906	+0.129	64 2084	10.0	9	+62.349	+21.295			12	-40.949	-9.063	65 1983	9.8
	181					241					301					361			
9	+18.019	+31.641	64 2061	10.0	9	+38.991	+28.552			9	+62.779	+56.304	63 2478	10.0	9	-40.619	-32.145		
9	+18.936	+9.143			17	+39.161	+30.348	64 2083	9.4	9	+63.140	+30.987			9	-40.578	-33.221		
9	+19.042	+6.503			9	+39.492	+62.793			9	+63.525	+22.904			12	-40.289	-48.209	65 1982	9.8
9	+19.185	+37.317			12	+40.436	+56.306	63 2458	10.0	10	+64.083	+25.272	64 2110	10.0	18	-39.216	-53.267	65 1984	9.3
9	+20.257	+24.940			19	+40.442	+11.386	64 2085	9.2	10	+64.503	+28.099	64 2111	10.0	18	-38.376	-34.410	65 1985	9.3
10	+20.306	+55.929	63 2447	10.0	9	+40.651	+26.084			9	-64.406	-55.146			9	-37.949	-19.627		
11	+20.591	+19.549	64 2062	9.9	9	+40.921	+0.561			11	-63.352	-55.208	65 1948	9.7	9	-37.763	-39.195		
9	+20.752	+26.982			9	+41.024	+20.645			9	-62.912	-50.375	65 1949	10.0	9	-37.392	-29.360		
14	+21.718	+63.258	63 2448	9.8	12	+41.490	+33.747	64 2087	10.0	9	-62.451	-46.283	65 1950	10.0	9	-37.265	-48.051		
9	+21.795	+12.179	64 2064	10.0	10	+42.078	+0.452			16	-62.137	-14.337	65 1951	9.3	16	-37.100	-30.281	65 1988	9.4
	191					251					311					371			
14	+21.886	+24.358	64 2063	9.7	9	+43.014	+48.819			12	-60.016	-53.388	65 1952	9.5	9	-36.220	-26.458		
9	+22.343	+14.561			12	+43.161	+18.414	64 2089	10.0	16	-59.126	-21.625	65 1953	9.2	11	-34.759	-3.508		
12	+22.542	+48.110	64 2065	10.0	10	+43.326	+35.416	64 2088	9.8	9	-58.849	-37.808			12	-34.620	-52.134	65 1991	9.6
11	+22.553	+22.982	64 2067	10.0	9	+43.942	+10.943			9	-58.341	-21.792			9	-34.156	-49.669		
14	+22.623	+32.113	64 2066	9.8	9	+44.024	+1.703			10	-58.236	-63.891			9	-33.992	-42.923		
9	+22.876	+20.218			16	+44.610	+35.121	64 2090	9.3	9	-58.050	-49.300			18	-33.791	-4.816	64 1997	8.9
9	+23.018	+30.369	64 2068	10.0	9	+44.696	+25.905			9	-56.531	-38.838			9	-33.523	-53.314		
16	+23.640	+23.200	64 2069	9.6	9	+44.932	+42.613			13	-54.843	-22.541	65 1959	9.4	12	-33.328	-50.995	65 1992	9.9
9	+23.877	+19.890			11	+44.940	+11.676	64 2091	9.9	9	-54.484	-62.807	65 1956	9.8	9	-33.025	-20.645		
10	+24.813	+18.525	64 2070	10.0	12	+46.807	+10.534	64 2092	9.6	12	-53.731	-19.480	65 1961	9.8	19	-32.786	-49.671	65 1993	9.0
	201					261					321					381			
9	+24.897	+21.846			9	+46.828	+21.597			9	-53.605	-5.840			10	-32.257	-61.670		
9	+25.293	+1.941			9	+47.175	+13.737			9	-53.307	-13.040			12	-31.928	-18.853	65 1996	10.0
9	+25.303	+5.889			10	+47.248	+39.395			9	-52.990	-33.770			18	-31.363	-40.722	65 1994	9.2
9	+25.936	+29.201			9	+47.262	+2.366			11	-52.732	-25.962	65 1962	10.0	11	-31.359	-43.988	65 1995	10.0
9	+25.984	+26.719			20	+47.871	+18.442	64 2093	9.0	9	-52.635	-62.230			9	-30.454	-57.856	65 1997	10.0
9	+26.921	+47.530			9	+47.950	+1.760			11	-52.523	-59.831	65 1960	9.9	9	-29.337	-2.967		
9	+27.049	+60.326			13	+47.979	+12.778	64 2094	9.7	13	-51.479	-54.292	65 1963	9.5	16	-29.248	-51.056	65 1998	9.6
9	+27.368	+48.877			9	+48.161	+14.538			11	-51.380	-48.356	65 1964	10.0	9	-29.151	-22.217		
9	+27.405	+39.587			9	+48.992	+16.923			13	-51.085	-19.171	65 1968	9.9	9	-28.567	-46.585		
18	+28.265	+49.358	64 2072	9.3	14	+49.914	+55.608	63 2463	9.6	10	-51.044	-47.054	65 1965	10.0	9	-28.168	-52.474		
	211					271					331					391			
9	+28.516	+59.908			12	+49.952	+29.499	64 2095	10.0	10	-50.795	-8.504			9	-27.928	-63.247	65 2000	10.0
9	+30.534	+13.164			9	+50.135	+28.845			38	-50.602	-55.834	65 1966	7.6	17	-27.873	-24.174	65 2001	9.1
20	+31.136	+3.971	64 2074	9.0	9	+50.736	+45.825	64 2096	10.0	9	-50.536	-48.102			9	-27.043	-31.319		
9	+31.233	+30.093			12	+51.394	+41.957	64 2097	9.7	11	-50.366	-4.918			9	-26.907	-5.979		
9	+31.283	+12.125			9	+51.814	+37.402			9	-50.255	-14.903			9	-26.644	-63.031		
9	+31.511	+13.809			9	+51.844	+2.422			9	-50.249	-17.174			9	-26.476	-26.066		
9	+31.727	+7.414			9	+52.518	+15.665			15	-50.071	-8.113	64 1987	9.1	9	-26.233	-46.365		
9	+32.989	+8.097			9	+52.844	+2.560			11	-49.857	-59.252	65 1967	9.6	9	-26.135	-23.176		
13	+33.696	+2.594	64 2076	9.9	9	+53.254	+35.614			15	-49.679	-45.474	65 1969	9.4	9	-26.048	-44.868		
11	+34.630	+0.427	64 2079	10.0	9	+53.698	+28.136			18	-49.263	-50.127	65 1970	9.1	11	-25.558	-38.697	65 2002	10.0
	221					281					341					401			
16	+34.673	+32.467	64 2078	9.5	9	+55.367	+9.945			13	-48.925	-50.193	65 1971	9.5	9	-25.342	-46.810		
10	+34.677	+20.835			14	+56.154	+61.046	63 2471	9.5	9	-48.852	-14.149			9	-25.117	-60.999		
9	+34.895	+8.615			9	+57.013	+16.481			9	-47.768	-22.519			14	-25.060	-15.262	65 2004	9.3
9	+35.319	+5.540			9	+57.104	+44.415	64 2100	10.0	9	-47.703	-16.848			15	-24.933	-6.360	64 2006	9.2
9	+35.615	+10.446			10	+57.645	+16.961	64 2103	10.0	10	-46.771	-27.800			13	-24.781	-47.932	65 2003	10.0
19	+35.909	+19.290	64 2080	9.3	16	+57.755	+27.557	64 2101	9.3	11	-46.675	-51.907	65 1975	10.0	9	-24.297	-46.211		
9	+36.174	+48.472			10	+58.076	+3.870			12	-46.550	-38.247	65 1976	9.8	15	-23.837	-32.276	65 2005	9.4
9	+36.751	+61.644			15	+58.112	+33.778	64 2102	9.3	13	-46.201	-35.563	65 1977	9.6	17	-23.792	-5.422	64 2009	9.0
9	+36.887	+35.638			9	+58.347	+16.925			11	-46.149	-29.130	65 1978	10.0	11	-23.631	-15.230	65 2007	10.0
9	+37.142	+22.722			16	+58.739	+18.577	64 2105	9.4	11	-46.050	-25.588	65 1979	9.8	20	-23.359	-41.967	65 2006	8.9

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,					531,					591,			
9	-23°053	-43°017			13	-5°369	-8°092	64 2030	9.4	18	+14°142	-7°854	64 2056	9.0	9	+29°193	-41°694		
9	-22°491	-53°847			13	-4°911	-16°994	65 2031	9.5	9	+14°284	-35°302			9	+29°386	-49°385		
11	-22°371	-28°553			11	-4°461	-43°773			9	+14°288	-61°449			9	+30°573	-22°012		
10	-21°795	-31°144			13	-4°270	-53°507	65 2032	9.8	9	+14°410	-59°356			9	+30°592	-47°624		
9	-21°357	-44°144			9	-3°889	-40°575			9	+14°552	-18°630			13	+30°791	-64°702	65 2078	9.4
18	-20°893	-5°308	64 2010	9.1	11	-3°882	-9°297			17	+14°574	-4°773	64 2058	9.2	10	+31°025	-3°593		
9	-20°711	-44°666			15	-3°701	-38°381	65 2033	9.2	10	+14°642	-45°643			9	+31°318	-21°352		
11	-19°526	-5°933	64 2015	9.8	13	-3°624	-46°274	65 2034	9.9	9	+14°660	-23°111			16	+31°463	-15°768	65 2077	9.4
9	-19°292	-54°633			18	-2°301	-14°371	65 2036	9.0	11	+16°430	-1°404			17	+31°574	-61°838	65 2079	9.2
12	-19°193	-51°115	65 2009	10.0	20	-2°273	-53°550	65 2035	8.6	13	+16°458	-42°940	65 2059	9.8	9	+31°808	-52°046		
	421					481					541					601			
11	-19°029	-12°353	65 2010	10.0	9	-1°280	-50°831			9	+17°062	-43°233			9	+31°814	-37°737		
9	-18°921	-28°636			11	-0°859	-7°022	64 2035	10.0	11	+17°069	-57°613			15	+32°096	-32°142	65 2080	9.6
11	-18°843	-36°007			9	-0°604	-19°013			9	+17°558	-15°402			9	+32°269	-6°770		
11	-18°547	-31°185	65 2011	10.0	13	-0°380	-6°566	64 2036	9.2	9	+17°689	-38°685			12	+32°512	-7°789	64 2075	10.0
18	-18°399	-31°496	65 2012	9.1	11	-0°169	-57°898	65 2037	10.0	9	+18°024	-36°619			13	+32°573	-14°364	65 2081	9.9
10	-18°303	-29°392			9	+0°612	-45°293			9	+18°104	-46°806			18	+32°793	-8°450	65 2082	8.7
10	-18°293	-30°683	65 2013	9.2	11	+0°784	-40°683	65 2038	9.8	9	+18°714	-37°307			9	+33°440	-6°746		
9	-17°687	-63°830			11	+1°747	-17°196			9	+19°120	-64°177			15	+33°720	-7°058	64 2077	9.2
13	-17°030	-47°946	65 2014	9.6	9	+1°875	-41°793			11	+19°461	-58°010	65 2061	10.0	11	+33°795	-25°204		
9	-17°151	-0°106			9	+2°000	-53°833			9	+19°693	-38°933			11	+34°559	-40°252		
	431					491					551					611			
9	-16°587	-13°847			12	+2°040	-56°434	65 2039	9.9	14	+19°800	-57°024	65 2062	9.6	12	+34°782	-56°774	65 2083	9.5
9	-16°345	-47°720			14	+2°220	-27°634	65 2040	9.4	13	+20°658	-36°559	65 2063	10.0	11	+34°864	-33°010		
9	-15°964	-39°963	65 2015	10.0	9	+2°350	-52°856			9	+20°725	-20°207			9	+35°157	-51°523		
12	-15°895	-40°419	65 2016	9.6	20	+2°388	-25°802	65 2041	8.5	9	+21°637	-52°003			9	+35°325	-55°618		
9	-15°745	-21°639			16	+2°621	-10°202	65 2042	9.2	12	+22°080	-38°252	65 2064	10.0	9	+35°722	-41°454		
9	-15°743	-28°224	65 2017	10.0	17	+2°682	-44°959	65 2043	9.2	12	+22°091	-30°490	65 2065	10.0	9	+35°905	-17°556		
12	-15°596	-26°978	65 2018	9.7	11	+2°876	-49°414			17	+22°377	-54°838	65 2067	9.3	12	+36°218	-37°749		
11	-14°375	-11°015	65 2019	10.0	10	+2°889	-23°492			11	+22°402	-31°367			13	+36°869	-58°436	65 2085	9.7
11	-14°322	-18°413			11	+3°654	-59°252			16	+22°431	-24°919	65 2066	9.2	9	+36°951	-6°422		
13	-14°132	-4°274	64 2019	9.6	19	+3°675	-18°267	65 2045	9.0	15	+22°433	-63°441	65 2068	9.2	9	+37°077	-47°960		
	441					501					561					621			
12	-13°970	-52°130	65 2020	10.0	16	+3°676	-40°439	65 2044	9.4	10	+22°676	-51°851			9	+37°310	-31°594		
10	-13°140	-38°271			9	+4°207	-45°206			9	+22°799	-64°023			9	+37°498	-16°829		
36	-13°084	-2°783	64 2020	7.4	16	+5°057	-29°767	65 2047	9.2	9	+23°090	-13°929			11	+37°764	-0°749		
14	-13°058	-2°638			9	+5°623	-31°513			19	+23°220	-17°846	65 2069	9.0	9	+37°902	-36°721		
17	-12°746	-52°874	65 2021	9.2	9	+6°583	-60°756			9	+23°435	-7°394			12	+38°160	-35°133		
9	-12°032	-50°934			11	+6°935	-23°567			10	+23°463	-48°176			10	+38°236	-22°642		
9	-11°865	-26°936			9	+6°942	-16°096			13	+23°576	-64°123	65 2072	9.2	14	+38°472	-16°808	65 2086	9.9
9	-11°861	-19°673			9	+7°154	-40°038			17	+23°740	-29°336	65 2071	9.0	14	+38°654	-38°414	65 2087	9.7
9	-11°750	-9°931	65 2022	10.0	15	+7°545	-39°481	65 2048	9.5	9	+23°982	-16°355			10	+38°900	-13°828		
9	-11°408	-36°919			11	+7°633	-20°708			17	+24°087	-50°471	65 2073	9.2	11	+38°973	-18°502		
	451					511					571					631			
11	-10°897	-36°411			18	+7°942	-48°802	65 2049	9.0	9	+24°123	-49°623			9	+39°086	-13°076		
12	-10°814	-36°355	65 2023	9.5	10	+8°195	-23°966			12	+24°140	-39°297			9	+39°353	-2°911		
13	-10°703	-19°778	65 2024	9.4	12	+8°465	-23°109	65 2050	10.0	11	+24°557	-13°551			24	+40°151	-6°824	64 2086	8.3
12	-9°990	-63°156	65 2025	9.2	12	+8°983	-10°602	65 2051	9.9	11	+24°579	-24°901	65 2074	10.0	9	+40°447	-6°372		
9	-9°805	-21°740			15	+9°064	-16°534	65 2052	9.4	11	+25°480	-51°064			9	+40°474	-17°376		
9	-9°652	-0°451			9	+9°573	-37°729	65 2053	9.9	12	+25°921	-13°821			9	+40°760	-3°247		
9	-9°013	-21°605			12	+9°577	-37°222			9	+25°945	-45°365			13	+40°927	-37°473	65 2089	10.0
13	-8°304	-50°129			9	+9°637	-63°581			9	+26°075	-57°526			10	+41°003	-6°528		
9	-7°839	-61°907			9	+9°792	-63°968			12	+26°332	-19°679			9	+41°586	-41°394		
12	-7°626	-20°138	65 2028	9.9	9	+9°940	-10°554	65 2054	10.0	13	+26°520	-1°495	64 2071	9.9	9	+42°132	-58°928		
	461					521					581					641			
19	-7°625	-59°468	65 2027	8.5	18	+10°002	-38°094	65 2055	8.9	9	+26°829	-40°580			12	+42°217	-6°238		
11	-7°532	-33°599			16	+10°130	-33°907	65 2056	9.2	10	+26°906	-62°833			13	+42°284	-41°156	65 2091	10.0
12	-7°444	-8°836	65 2029	9.5	11	+10°451	-20°304	65 2057	10.0	13	+27°375	-6°683	64 2073	10.0	15	+42°301	-20°000	65 2090	9.6
9	-7°251	-31°931			9	+10°876	-16°763			12	+27°520	-50°797	65 2075	10.0	9	+42°587	-9°874		
9	-7°226	-0°807			11	+11°761	-20°531	65 2058	10.0	11	+27°623	-49°857	65 2076	10.0	9	+42°623	-58°912		
11	-5°907	-7°984	64 2029	9.8	9	+11°926	-31°039			11	+28°044	-10°864			9	+43°094	-13°522		
9	-5°886	-42°520			11	+12°409	-32°437			9	+28°250	-16°306			13	+43°098	-61°510	65 2092	9.2
9	-5°874	-24°026			9	+12°717	-0°397			11	+28°484	-27°707			10	+43°155	-25°172		
9	-5°870	-37°639			9	+12°908	-38°784			11	+28°810	-10°075			10	+44°078	-16°772		
19	-5°823	-33°481	65 2030	8.8	9	+13°416	-59°524			9	+28°950	-57°522			9	+44°452	-37°477		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651,				PLATE CENTRE. 13^h 3^m, - 65°. Plate 1533. 1896, June 5. PROVISIONAL CONSTANTS. $a = -0.01138$ $d = -0.00025$ $b = +0.00005$ $e = -0.01118$ $c = -0.0029$ $f = -0.0255$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$														
II	+44.671	-19.224	65 2093	10.0															
9	+45.101	-38.334																	
9	+45.642	-51.021																	
II	+45.684	-5.380																	
12	+45.711	-47.578	65 2094	9.8															
9	+46.159	-5.683																	
14	+46.901	-46.090	65 2095	9.4															
14	+47.920	-13.428	65 2096	9.5															
13	+48.050	-14.460	65 2097	9.8															
10	+48.114	-7.559																	
	661																		
9	+48.401	-60.577	65 2099	10.0															
15	+49.325	-15.086																	
19	+49.635	-37.888	65 2100	9.0															
9	+49.802	-51.647																	
9	+50.163	-53.096																	
12	+50.984	-1.451																	
9	+51.254	-2.043																	
9	+51.706	-62.310	65 2101	9.9															
12	+52.316	-56.082	65 2103	9.8															
9	+52.474	-62.297																	
	671																		
9	+52.869	-16.556																	
18	+53.696	-5.963	64 2098	8.9															
17	+53.910	-28.511	65 2104	9.2															
10	+53.987	-7.500																	
9	+54.116	-6.755																	
15	+54.870	-48.664																	
12	+54.899	-4.321	64 2099	9.9															
9	+55.122	-38.597	65 2105	9.3															
9	+55.378	-52.062																	
11	+56.082	-9.653																	
	681																		
9	+56.177	-57.383																	
14	+56.259	-19.399	65 2107	10.0															
9	+56.587	-56.100																	
11	+56.742	-37.738	65 2108	10.0															
9	+57.996	-54.896																	
13	+58.653	-3.086	64 2106	10.0															
15	+58.843	-58.208	65 2110	8.8															
9	+58.890	-9.787																	
9	+59.218	-21.086																	
9	+59.768	-28.901																	
	691																		
11	+59.788	-9.528																	
9	+59.905	-45.787																	
18	+60.878	-19.891	65 2111	8.8															
9	+61.040	-2.981																	
14	+61.605	-8.334	64 2109	9.8															
9	+61.900	-7.180																	
11	+62.231	-12.574	65 2112	10.0															
12	+62.525	-23.057	65 2113	10.0															
11	+62.601	-0.317																	
11	+63.350	-38.739	65 2114	10.0															
	701																		
9	+63.864	-3.025																	
9	+63.977	-15.827																	
9	+64.681	-27.167																	
11	+64.788	-17.146	65 2115	10.0															

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
10	-27°496	+57°609			9	-16°656	+44°286			9	-6°577	+34°491			24	+3°790	+59°053	63 2577	9°0
9	-27°318	+60°222			9	-16°609	+60°088			9	-6°495	+2°000	64 2191	9°7	9	+4°159	+54°976		
9	-27°214	+29°655			9	-16°574	+52°203			10	-6°285	+57°805	63 2557	9°8	26	+4°405	+16°324	64 2212	9°0
9	-26°402	+63°786			9	-16°573	+25°216			9	-6°195	+43°950			10	+4°493	+43°150	64 2213	9°7
15	-26°282	+56°427	63 2520	9°8	9	-16°348	+56°338			9	-6°083	+49°278	64 2193	9°9	9	+4°558	+52°592		
9	-26°207	+37°883			9	-16°044	+49°348			12	-5°970	+62°211	63 2558	9°7	10	+4°568	+51°431	64 2214	9°6
9	-26°133	+52°461			11	-16°027	+56°104	63 2536	9°8	9	-5°910	+22°579	64 2192	9°8	10	+4°895	+23°711	64 2215	9°5
16	-26°044	+0°765	64 2146	9°2	9	-15°877	+17°026			10	-5°906	+60°946			9	+4°943	+43°582		
9	-25°838	+49°005			9	-15°868	+49°650			14	-5°799	+54°649	63 2560	9°5	9	+5°115	+39°398		
15	-25°455	+32°259	64 2147	9°5	27	-15°593	+11°735	64 2166	9°0	9	-5°617	+47°316			9	+5°242	+55°837		
	181					241					301					361			
9	-25°346	+53°533			9	-15°588	+9°418	64 2165	9°7	9	-5°549	+47°497			16	+5°251	+44°666	64 2216	9°2
9	-24°673	+19°848			9	-15°491	+3°008	64 2164	9°9	10	-5°419	+13°647	64 2194	9°6	14	+5°386	+49°322	64 2217	9°5
9	-24°396	+26°213			9	-15°385	+28°614			9	-5°329	+20°991			10	+5°524	+6°909	64 2218	9°5
10	-24°088	+2°916			10	-14°724	+14°783	64 2167	9°6	9	-5°232	+15°575	64 2195	9°9	9	+5°557	+46°026		
9	-23°961	+49°574			9	-14°648	+11°580			9	-4°985	+10°603			9	+5°594	+64°637		
9	-23°920	+36°373	64 2148	10°0	9	-14°380	+15°050	64 2168	9°9	9	-4°831	+37°835			9	+5°815	+46°187		
11	-23°789	+53°438	63 2523	10°0	9	-14°303	+27°508			20	-4°490	+45°510	64 2196	8°9	10	+6°362	+51°687	64 2219	9°9
11	-23°222	+1°272	64 2149	10°0	10	-14°121	+63°158			12	-4°318	+26°986	64 2197	9°6	10	+6°826	+51°440	64 2220	9°8
9	-22°757	+56°891			9	-14°051	+51°525	64 2169	9°9	11	-4°125	+58°000	63 2564	9°6	9	+6°854	+58°625		
14	-22°570	+50°275	64 2150	9°6	11	-13°702	+51°969	64 2170	9°5	9	-4°103	+15°865			9	+7°102	+63°463		
	191					251					311					371			
9	-22°099	+31°872			9	-13°549	+8°198			9	-3°780	+46°016			9	+8°064	+62°389		
10	-21°924	+00°506	63 2529	10°0	20	-13°300	+13°464	64 2171	9°3	9	-2°973	+53°273			9	+8°418	+25°331		
10	-21°854	+60°296			9	-13°147	+45°774			18	-2°931	+60°463	63 2565	9°3	9	+8°436	+50°631		
19	-21°794	+60°990	63 2528	9°2	9	-13°082	+21°225			9	-2°806	+12°680			28	+8°505	+61°133	63 2585	8°3
9	-21°544	+59°872			9	-13°025	+45°290			11	-2°806	+58°596	63 2566	9°6	9	+8°706	+37°332		
9	-21°452	+10°967			9	-12°759	+28°525			13	-2°394	+59°538	63 2567	9°5	16	+8°748	+38°383	64 2221	9°4
9	-21°328	+62°244			9	-12°705	+23°484	64 2173	9°7	9	-2°300	+54°696			11	+8°752	+58°235	63 2586	9°9
9	-21°309	+40°415			10	-12°645	+50°210	64 2174	9°7	9	-2°061	+36°061	64 2198	9°9	15	+8°801	+15°480	64 2222	9°5
9	-21°116	+58°771			9	-12°332	+37°822			24	-1°907	+37°715	64 2199	9°0	16	+9°056	+48°472	64 2223	9°2
9	-20°954	+50°477			10	-12°200	+51°303	64 2175	9°8	9	-1°795	+21°391			10	+9°278	+57°297	63 2588	9°9
	201					261					321					381			
9	-20°893	+57°790			9	-11°796	+33°835			10	-1°369	+14°922	64 2200	9°6	9	+9°551	+12°209		
9	-20°886	+46°030			16	-11°726	+31°843	64 2177	9°4	9	-1°197	+5°975			16	+9°640	+60°275	63 2589	9°2
10	-20°714	+50°119	64 2152	10°0	9	-11°704	+17°136	64 2176	9°7	9	-1°081	+12°200	64 2201	9°9	16	+9°703	+18°992	64 2224	9°4
9	-20°704	+4°079			9	-11°191	+50°937	64 2178	9°7	16	-1°067	+62°707	63 2570	9°4	9	+9°786	+40°403		
9	-20°635	+37°267			10	-10°877	+20°022	64 2179	9°5	9	-0°951	+55°846			10	+9°806	+3°224	64 2225	9°5
9	-20°203	+40°213			9	-10°276	+9°060			9	-0°714	+54°967			9	+10°013	+43°505		
9	-20°167	+18°082			9	-9°966	+59°041			10	-0°585	+51°681	64 2202	9°7	10	+10°774	+1°124	64 2226	9°7
11	-19°917	+12°505	64 2153	9°7	9	-9°929	+47°114			9	-0°563	+49°452			9	+11°238	+33°864	64 2227	9°8
9	-19°848	+49°845			9	-9°541	+22°903			10	-0°548	+48°103	64 2203	9°7	9	+11°457	+58°210		
10	-19°844	+52°958	63 2530	9°8	10	-9°291	+56°508	63 2547	9°8	13	-0°222	+62°849	63 2571	9°6	9	+11°488	+39°194		
	211					271					331					391			
9	-19°737	+27°704			9	-9°002	+4°650	64 2181	9°9	9	-0°191	+34°271			9	+11°678	+54°398		
27	-19°699	+28°880	64 2155	8°9	10	-8°980	+6°446	64 2180	9°6	9	+0°624	+0°576			9	+11°703	+45°397		
12	-19°571	+28°100	64 2156	9°7	13	-8°959	+40°534	64 2182	9°5	14	+0°773	+49°510	64 2206	9°5	9	+11°779	+20°831		
18	-19°506	+1°943	64 2154	9°2	80	-8°658	+13°856	64 2183	6°1	9	+0°851	+45°738			9	+11°804	+10°063		
9	-19°451	+33°031			15	-8°595	+51°065	64 2184	9°3	15	+0°887	+28°749	64 2205	9°5	16	+12°108	+27°341	64 2228	9°4
10	-19°148	+40°380	64 2158	10°0	9	-8°549	+64°668			11	+1°305	+20°175	64 2207	9°5	9	+12°383	+18°842		
15	-19°051	+63°314	63 2532	9°8	9	-8°399	+54°349			9	+1°550	+1°019			9	+12°551	+59°706	63 2599	9°9
9	-18°991	+36°909			9	-8°161	+1°490	64 2185	9°8	9	+1°665	+54°811			10	+12°743	+57°182	63 2600	9°7
40	-18°743	+27°552	64 2160	8°0	20	-8°043	+61°626	63 2550	9°3	9	+1°874	+56°715			10	+13°039	+12°323	64 2229	9°6
9	-18°731	+59°810			9	-7°940	+13°350			10	+1°918	+10°972	64 2208	9°7	9	+13°047	+47°617		
	221					281					341					401			
9	-18°698	+43°773			9	-7°763	+0°594	64 2187	9°9	15	+1°931	+29°462	64 2209	9°5	9	+13°065	+60°276		
9	-18°662	+58°781			10	-7°374	+55°335	63 2552	9°8	9	+2°046	+9°505	64 2210	9°7	9	+13°213	+45°931		
10	-18°429	+0°317	64 2159	10°0	10	-7°291	+53°322	63 2553	9°8	9	+2°065	+39°503			9	+13°227	+48°910		
24	-18°283	+59°142	63 2535	8°8	9	-7°211	+15°424	64 2188	9°9	9	+2°369	+36°519			9	+13°440	+41°541		
9	-18°240	+17°349			18	-7°139	+58°905	63 2554	9°3	9	+2°481	+47°058			11	+13°459	+42°159	64 2230	9°7
9	-17°961	+14°603			15	-7°138	+50°052	64 2189	9°5	9	+2°856	+38°376			16	+13°507	+55°220	63 2603	9°3
9	-17°801	+58°642			9	-7°135	+30°237			9	+3°018	+25°361			10	+14°326	+37°550	64 2231	9°7
18	-17°695	+28°522	64 2161	9°2	19	-6°982	+55°434	63 2555	9°2	9	+3°546	+45°304			9	+14°366	+3°918		
28	-17°689	+34°439	64 2162	8°8	9	-6°832	+16°598	64 2190	9°9	10	+3°572	+46°168			9	+14°380	+56°170		
40	-17°000	+19°570	64 2163	7°8	9	-6°766	+38°025			9	+3°608	+39°835			10	+14°521	+23°761	64 2232	9°6

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,					531,					591,			
10	+14.683	+50.374			11	+24.976	+58.616	63 2627	9.5	16	+35.750	+55.316	63 2648	9.5	15	+45.360	+14.974	64 2311	9.5
17	+14.921	+58.436	63 2604	9.2	15	+25.027	+40.248	64 2264	9.4	9	+35.781	+7.811			13	+45.542	+6.442	64 2315	9.6
9	+15.332	+41.689			10	+25.095	+37.940	64 2266	9.9	28.	+36.064	+61.571	63 2649	8.7	9	+45.570	+6.050		
9	+15.439	+35.346	64 2233	9.9	11	+25.105	+23.788	64 2268	9.5	9	+36.178	+19.102			9	+45.822	+27.659		
11	+15.475	+7.200	64 2235	9.5	11	+25.304	+54.728	63 2629	9.9	10	+36.182	+24.561	64 2292	9.9	9	+45.852	+57.714		
16	+15.481	+14.273	64 2234	9.5	9	+25.632	+13.760			16	+36.310	+28.556	64 2293	9.3	9	+45.988	+25.283		
9	+15.679	+33.027			10	+25.796	+58.950			10	+36.510	+33.164	64 2294	9.7	10	+46.081	+33.198	64 2314	9.9
18	+15.886	+59.980	63 2606	9.3	9	+26.045	+14.500	64 2269	9.9	11	+36.699	+33.879	64 2295	9.9	11	+46.130	+33.962	64 2313	9.9
9	+15.922	+39.310			19	+26.273	+35.492	64 2270	9.1	9	+36.710	+55.596			10	+46.227	+42.908		
9	+16.027	+14.398	64 2236	9.9	9	+26.883	+2.860			11	+37.078	+10.293	64 2296	9.6	16	+46.325	+47.264	64 2312	9.5
	421					481					541					601			
9	+16.152	+9.444	64 2237	9.9	9	+27.005	+39.550			16	+37.346	+56.434	63 2652	9.5	9	+46.379	+45.034		
13	+16.155	+7.959	64 2238	9.5	12	+27.573	+36.228	64 2272	9.5	9	+37.476	+18.971			9	+46.459	+35.105		
9	+16.488	+55.888			9	+28.022	+33.179			10	+37.963	+56.680			52	+46.554	+23.144	64 2316	7.3
9	+16.567	+53.922			9	+28.120	+44.854			9	+38.032	+59.158			10	+46.833	+25.161	64 2317	9.9
9	+16.704	+46.331			10	+28.220	+21.449	64 2274	9.7	9	+38.208	+29.571			9	+47.738	+51.362		
9	+16.939	+30.416			9	+28.237	+35.256			9	+38.225	+34.708			9	+47.779	+41.882		
9	+16.958	+47.636			32	+28.362	+29.966	64 2275	8.7	11	+38.242	+15.563	64 2298	9.5	10	+47.832	+61.080		
9	+17.410	+37.342			11	+28.702	+18.263	64 2277	9.7	10	+38.293	+26.661			9	+47.834	+55.678		
9	+18.424	+18.498			10	+28.748	+45.660	64 2276	9.8	10	+38.407	+14.840	64 2300	9.9	9	+47.893	+59.478		
18	+18.561	+14.362	64 2239	9.4	9	+28.913	+40.538			9	+38.419	+35.161			9	+47.990	+23.705		
	431					491					551					611			
9	+18.684	+6.632	64 2242	9.8	11	+29.018	+26.959	64 2279	9.7	10	+38.448	+49.182	64 2297	9.9	9	+48.188	+42.084		
11	+18.726	+54.682	63 2609	9.7	9	+29.353	+39.738	64 2280	9.8	9	+38.620	+22.385			20	+48.218	+28.969	64 2318	9.2
9	+18.746	+53.558			9	+29.365	+47.746			9	+38.815	+29.101			9	+48.224	+62.774		
10	+18.798	+23.121	64 2241	9.5	9	+29.410	+60.285			9	+38.842	+43.398	64.2299	9.6	9	+48.826	+59.016		
9	+18.913	+19.726			25	+29.485	+39.322	64 2281	8.9	13	+38.881	+43.602			9	+49.032	+30.840		
9	+18.959	+60.492			10	+29.524	+24.121			10	+38.934	+1.764	64 2302	9.9	10	+49.166	+33.293	64 2320	9.9
9	+19.012	+3.555	64 2243	9.9	9	+30.106	+26.938			16	+38.934	+54.954	63 2655	9.4	9	+49.399	+42.619		
11	+19.260	+60.693	63 2610	9.7	9	+30.146	+55.076			9	+38.954	+42.683			9	+49.514	+6.796		
11	+19.700	+22.696	64 2245	9.6	9	+30.530	+24.453			13	+39.073	+32.356	64 2301	9.5	11	+49.818	+34.068	64 2321	9.7
9	+19.742	+35.610			15	+30.547	+44.477	64 2282	9.5	9	+39.329	+31.824			9	+50.409	+1.921		
	441					501					561					621			
9	+20.013	+21.078			9	+30.630	+58.429			9	+39.354	+20.567			9	+50.472	+24.587		
10	+20.123	+0.311	64 2246	9.7	9	+30.662	+30.177			9	+39.490	+19.868			17	+50.553	+11.589	64 2323	9.4
10	+20.253	+60.680	63 2616	9.9	12	+31.238	+8.463	64 2283	9.5	9	+39.774	+42.534			11	+50.700	+17.615	64 2324	9.7
9	+20.278	+39.534			9	+31.495	+38.606			9	+40.110	+41.886			12	+50.956	+38.678	64 2322	9.7
17	+20.466	+18.915	64 2248	9.4	9	+31.599	+17.603			9	+40.312	+58.046			9	+50.981	+27.446		
9	+20.589	+0.392	64 2252	9.9	9	+32.707	+45.596			9	+40.423	+35.301			9	+51.080	+40.942		
44	+20.616	+14.479	64 2249	8.1	9	+32.766	+14.518			9	+40.484	+18.081			19	+51.501	+29.089	64 2325	9.2
14	+20.870	+38.050	64 2251	9.4	9	+32.827	+46.730			9	+41.036	+13.824			9	+51.528	+43.804		
9	+20.978	+45.452	64 2250	9.9	9	+32.881	+40.786			10	+41.151	+25.663	64 2304	9.7	9	+51.581	+29.119		
10	+21.145	+58.642			14	+32.893	+58.206	63 2641	9.6	16	+41.169	+38.331	64 2303	9.2	10	+51.930	+18.448		
	451					511					571					631			
21	+21.235	+62.249	63 2618	9.2	9	+33.299	+13.196			10	+41.212	+18.583			13	+52.117	+6.035	64 2326	9.6
10	+21.351	+52.129	64 2253	9.9	12	+33.584	+60.834	63 2643	9.8	9	+41.221	+10.125			9	+52.211	+62.859		
9	+21.882	+37.841			9	+33.640	+55.951			10	+41.575	+30.711			9	+52.438	+38.520		
9	+21.983	+50.218	64 2255	9.9	15	+33.655	+49.056	64 2284	9.5	9	+41.835	+1.180	64 2305	9.9	9	+52.598	+36.902		
9	+22.340	+36.957			24	+33.911	+48.266	64 2286	8.7	9	+41.881	+25.679			9	+52.922	+4.969		
14	+22.368	+38.446	64 2258	9.4	9	+34.200	+24.626			9	+42.159	+32.553			9	+53.420	+17.337		
9	+22.466	+17.130			10	+34.378	+64.160	63 2644	9.9	9	+42.420	+49.742			10	+53.599	+25.223		
10	+22.601	+49.332			9	+34.384	+30.076			11	+42.640	+18.809	64 2306	9.7	14	+53.705	+5.860	64 2330	9.5
9	+22.832	+37.271			9	+34.441	+45.052			9	+42.957	+17.251			9	+53.706	+21.079		
9	+22.845	+24.054			16	+34.507	+10.577	64 2289	9.5	10	+43.046	+15.361			9	+53.777	+0.699		
	461					521					581					641			
9	+22.926	+14.095			15	+34.606	+41.007	64 2287	9.6	10	+43.436	+43.446	64 2307	9.9	13	+53.804	+48.687	64 2327	9.7
10	+22.976	+30.251	64 2260	9.9	12	+34.868	+32.094	64 2288	9.6	9	+43.446	+52.845			11	+53.813	+38.190	64 2328	9.9
9	+23.691	+45.680			9	+34.915	+0.307			11	+43.709	+54.674	63 2665	9.8	9	+53.991	+11.441		
10	+24.036	+47.410	64 2261	9.9	9	+35.043	+11.501			11	+44.005	+60.561	63 2666	9.7	9	+54.167	+50.278		
19	+24.278	+60.451	63 2624	9.3	20	+35.177	+5.295	64 2290	9.2	11	+44.278	+18.848	64 2308	9.7	9	+54.262	+37.252		
24	+24.281	+23.999	64 2262	9.2	10	+35.296	+53.432			10	+44.596	+4.980	64 2309	9.7	9	+54.328	+4.333		
10	+24.607	+32.823	64 2263	9.8	10	+35.376	+49.338			9	+44.959	+32.244			9	+54.487	+9.550		
9	+24.611	+27.104			9	+35.485	+8.106			10	+44.965	+9.757	64 2310	9.7	9	+54.669	+34.857		
18	+24.770	+15.178	64 2267	9.5	9	+35.558	+23.544			9	+45.222	+8.399			9	+54.944	+51.865		
11	+24.924	+32.068	64 2265	9.5	15	+35.614	+31.720	64 2291	9.5	9	+45.246	+46.772			9	+55.118	+5.155		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651,					711,					771,					831,			
9	+55°354	+21°223			9	-57°592	-38°764	65 2105	9.3	10	-45°182	-3°946			11	-34°893	-40°512		
22	+55°732	+56°056	63 2682	9.1	9	-57°464	-46°018			9	-45°124	-26°860			9	-34°714	-23°339		
9	+56°162	+2°073			16	-57°144	-48°823			9	-45°114	-17°942			9	-34°674	-9°649		
9	+56°181	+10°533			12	-56°615	-3°105	64 2106	10.0	9	-45°112	-29°350			9	-34°558	-50°068		
15	+56°214	+61°818	63 2683	9.5	9	-56°394	-52°159			9	-45°048	-19°053			11	-34°325	-57°095	65 2135	9.9
16	+56°881	+42°939	64 2332	9.5	11	-56°046	-37°780	65 2108	10.0	9	-44°933	-36°212			9	-33°903	-24°109		
9	+57°115	+39°827			9	-55°806	-9°773			11	-44°389	-0°697	64 2120	10.0	9	-33°803	-27°728		
10	+57°196	+51°954	63 2685	9.9	9	-55°405	-14°047			9	-44°249	-47°323			12	-33°352	-33°105	65 2136	9.8
9	+57°250	+6°510			9	-55°335	-10°268			11	-44°244	-18°142			10	-32°715	-11°693	65 2137	10.0
9	+57°313	+48°445			10	-55°194	-57°400			9	-44°039	-9°295			9	-32°556	-1°456		
	661					721					781					841			
15	+57°634	+41°183	64 2334	9.5	11	-55°026	-9°439			9	-44°030	-10°306			16	-32°362	-18°417	65 2138	9.3
11	+57°912	+20°301	64 2335	9.5	9	-55°000	-51°474			21	-43°845	-32°072	65 2122	9.0	18	-32°010	-11°739	65 2139	9.2
9	+58°411	+12°966			9	-54°913	-56°097			18	-43°676	-43°225	65 2121	9.1	9	-31°645	-45°669		
10	+58°884	+5°035	64 2339	9.7	11	-54°761	-21°009			9	-43°644	-21°104			10	-31°328	-44°309		
15	+59°138	+60°654	63 2688	9.5	10	-54°238	-2°825			9	-43°415	-20°775			24	-81.133	-42.096	65 2140	8.8
9	+59°144	+46°107			9	-54°159	-64°769			18	-43°411	-59°702	65 2119	9.2	9	-31°004	-42°535		
9	+59°152	+22°457			10	-53°652	-28°758			20	-43.409	-10.298	65 2124	9.2	20	-30°926	-23°599	65 2141	8.7
9	+59°436	+11°311			9	-53°615	-55°452			9	-43°247	-60°090	65 2120	10.0	14	-30°818	-6°888	64 2139	9.3
9	+59°543	+39°786			9	-53°611	-23°809			19	-43°179	-52°203	65 2123	9.2	9	-30°020	-54°173		
18	+59°564	+49°545	64 2337	9.2	10	-53°554	-54°820			11	-43°107	-8°015			9	-29°771	-6°485		
	671					731					791					851			
9	+59°822	+8°195			9	-53°456	-16°988			9	-43°035	-36°246			9	-29°766	-25°988		
11	+60°218	+45°689	64 2338	9.9	15	-53°304	-8°121	64 2109	9.8	11	-42°918	-27°932			9	-29°348	-32°131		
15	+60°465	+12°867	64 2340	9.5	20	-53°187	-19°700	65 2111	8.8	10	-42°325	-25°072			9	-29°209	-4°502		
10	+60°477	+60°253	63 2689	9.8	9	-53°098	-6°937			10	-42°213	-27°844			9	-28°228	-45°290		
9	+60°995	+43°171			9	-53°023	-57°910	65 2109	10.0	9	-42°144	-63°714			9	-27°994	-45°501		
9	+61°422	+57°248			11	-52°876	-0°042			9	-41°954	-48°047			9	-27°844	-30°447		
15	+61°425	+57°061	63 2690	9.2	9	-52°666	-35°475			9	-41°898	-41°234			10	-27°521	-51°437		
9	+61°723	+39°517			26	-52.502	-58.055	65 2110	8.8	9	-41°752	-17°605			14	-27°161	-13°152	65 2142	9.5
12	+61°773	+33°530	64 2341	9.8	9	-52°380	-45°570			11	-41°458	-48°899			9	-27°105	-56°321		
9	+61°968	+17°735			9	-52°379	-23°251			16	-41°324	-16°218	65 2126	9.3	9	-27°050	-28°080		
	681					741					801					861			
9	+62°161	+39°889			12	-52°359	-12°306	65 2112	10.0	9	-40°815	-62°765			9	-26°851	-54°673		
17	+62°493	+3°608	64 2342	9.3	9	-52°302	-45°576			10	-40°776	-15°429			9	-26°514	-42°727		
9	+62°549	+44°819			10	-51°428	-1°664			9	-40°759	-1°221			10	-26°503	-28°550		
18	+63°414	+18°164	64 2343	9.2	9	-51°370	-51°394			10	-40°707	-34°504			10	-26°383	-57°325		
9	+63°700	+63°945			12	-51°337	-22°733	65 2113	10.0	13	-40°656	-16°549	65 2128	9.6	9	-26°297	-23°699		
9	+64°057	+26°759			9	-50°508	-18°500			14	-40°454	-57°396	65 2125	9.5	12	-25°733	-54°087	65 2143	10.0
12	+64°132	+58°395	63 2693	9.6	9	-50°408	-15°422			11	-40°454	-12°124			9	-25°230	-27°800		
9	+64°447	+21°817			9	-49°952	-60°046			26	-40.312	-34.279	65 2127	8.7	10	-25°049	-27°195		
9	+64°747	+48°591			9	-49°736	-41°317			29	-40°053	-24°001			9	-24°932	-33°206		
9	-64°979	-17°736			15	-49°637	-6°205	64 2113	9.5	11	-39°959	-44°217			10	-24°820	-34°111		
	691					751					811					871			
11	-64°415	-0°834			12	-49°498	-16°680	65 2115	10.0	11	-39°928	-16°925			10	-24°444	-42°230		
11	-64°380	-2°015			11	-49°395	-38°306	65 2114	10.0	9	-39°566	-21°309			9	-23°786	-5°738		
9	-64°061	-2°584			9	-48°899	-26°669			9	-38°783	-60°353			13	-23°743	-11°510	65 2145	9.6
19	-63°147	-37°954	65 2100	9.0	9	-48°672	-7°467			11	-38°602	-36°814	65 2129	10.0	9	-23°652	-6°150		
10	-62°721	-61°148	65 2099	10.0	10	-48°194	-20°806			10	-38°590	-3°784			9	-23°370	-33°455		
9	-62°201	-15°712			9	-48°054	-39°440			11	-38°115	-42°961	65 2130	10.0	12	-23°260	-41°518	65 2144	9.6
9	-61°954	-52°160			9	-48°011	-52°853			9	-38°067	-27°219			9	-23°224	-41°850		
9	-61°502	-53°569			9	-47°971	-22°083			9	-38°002	-24°835			19	-22°814	-49°556	65 2146	9.1
9	-61°403	-16°951			16	-46°950	-20°851	65 2116	9.4	9	-37°865	-10°562			9	-22°500	-43°412		
19	-61°346	-6°317	64 2098	8.9	10	-46°770	-11°120			15	-37°814	-33°165	65 2131	9.4	9	-22°474	-2°300		
	701					761					821					881			
10	-60°928	-7°837			9	-46°370	-6°947			12	-37°634	-9°799	65 2133	10.0	9	-22°402	-64°792		
10	-60°861	-7°078			9	-46°292	-27°474			9	-37°520	-31°587			9	-22°212	-37°715		
12	-60°265	-4°607	64 2099	9.9	9	-46°205	-53°519			9	-37°114	-13°031			12	-22°004	-33°467	65 2148	9.9
9	-60°069	-26°327			10	-45°988	-6°027			11	-37°084	-38°952			9	-21°958	-13°124		
16	-59°521	-28°795	65 2104	9.2	9	-45°788	-35°419			11	-36°843	-59°206	65 2132	10.0	28	-21°531	-4°910	64 2151	8.6
11	-59°310	-62°659	65 2101	9.9	9	-45°715	-0°303			9	-36°393	-19°255			10	-21°370	-53°929		
12	-59°155	-56°397	65 2103	9.8	19	-45°492	-37°024	65 2117	8.8	9	-36°370	-30°566			9	-21°036	-10°078		
10	-58°710	-9°836			9	-45°468	-35°839			9	-36°336	-54°046			9	-21°023	-61°468		
9	-58°554	-62°570			9	-45°408	-37°816			12	-35°668	-32°104	65 2134	10.0	9	-20°712	-55°035		
13	-57°834	-19°538	65 2107	10.0	12	-45°193	-23°173	65 2118	10.0	9	-35°449	-47°161			9	-20°615	-8°264		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	891,					951,					1011,					1071,			
9	-20°299	-45°077			12	-5°672	-60°148	65 2170	9.8	9	+17°368	-4°935			9	+30°184	-33°843		
9	-19°989	-31°434			11	-5°516	-53°750	65 2171	9.9	12	+17°591	-26°695	65 2198	9.5	13	+30°525	-9°655	65 2218	9.6
9	-19°947	-36°983			10	-4°105	-38°753	65 2172	9.9	9	+17°639	-36°599			11	+30°822	-54°009	65 2220	9.9
9	-19°906	-36°838			20	-3°710	-39°174	65 2173	9.2	11	+17°963	-38°279	65 2199	9.8	9	+31°055	-33°731		
9	-19°830	-50°500			18	-2°867	-28°652	65 2174	9.1	9	+18°412	-6°268	64 2240	9.9	10	+31°416	-37°051		
9	-19°536	-58°075			9	-2°778	-41°718			9	+18°882	-7°378			16	+31°501	-9°677	65 2219	9.3
15	-18°574	-1°763	64 2157	9.3	12	-2°725	-24°523	65 2176	9.6	10	+18°894	-7°231	64 2244	9.5	10	+31°566	-39°642		
9	-18°563	-63°904			10	-2°648	-63°670	65 2177	9.9	9	+18°923	-17°540			9	+31°787	-15°233		
14	-18°477	-48°174	65 2149	9.4	14	-2°613	-50°829	65 2175	9.5	9	+19°064	-45°223			9	+32°523	-46°957		
10	-18°389	-49°054			11	-2°102	-37°261	65 2178	9.8	9	+19°310	-3°047			16	+32°691	-7°905	64 2285	9.4
	901					961					1021					1081			
9	-18°162	-37°869			9	-1°742	-60°049			11	+19°792	-31°421	65 2200	9.8	13	+32°717	-62°226	65 2222	9.6
10	-17°865	-29°417			9	-0°618	-27°873			36	+19°946	-42°310	65 2201	6.6	9	+32°734	-16°572		
9	-17°462	-63°350			9	-0°618	-20°867	65 2179	9.9	19	+20°080	-7°654	64 2247	9.2	9	+33°089	-40°384		
9	-17°147	-47°616			9	-0°612	-36°667			10	+20°933	-2°557	64 2254	9.9	9	+33°231	-34°695		
13	-16°822	-55°919	65 2150	9.6	9	-0°608	-44°224			9	+21°068	-21°324			10	+33°538	-61°550	65 2223	9.8
11	-16°731	-34°838			16	-0°364	-41°279	65 2180	9.4	11	+21°115	-53°283			9	+33°560	-17°212		
10	-14°800	-34°111			9	-0°162	-3°344			12	+21°267	-21°583	65 2202	9.5	9	+33°910	-46°166		
9	-14°786	-45°030			9	+0°130	-6°776	64 2204	9.9	25	+21°448	-6°102	64 2256	9.0	9	+34°104	-29°630		
9	-14°356	-25°459			9	+0°177	-20°600	65 2182	9.9	9	+21°641	-9°455	65 2203	9.9	9	+34°476	-41°421		
9	-14°347	-15°707			28	+0°223	-61°216	65 2181	8.7	11	+21°658	-2°413	64 2257	9.7	10	+34°898	-21°380		
	911					971					1031					1091			
12	-14°207	-54°702	65 2151	9.4	9	+1°258	-53°750			9	+21°844	-26°763			9	+35°337	-53°354		
13	-14°038	-61°774	65 2152	9.8	9	+1°357	-43°695			11	+22°602	-4°585	64 2259	9.8	9	+35°494	-7°920		
9	-14°015	-41°422			11	+1°760	-15°039	65 2183	9.7	9	+22°712	-48°565			9	+35°880	-38°207		
9	-13°901	-28°163			9	+1°804	-45°678			9	+22°823	-38°813			9	+35°882	-3°797		
9	-13°854	-31°321			9	+3°156	-11°452	65 2184	9.9	9	+23°059	-23°593			12	+36°063	-30°212	65 2226	9.6
9	-13°600	-30°947			12	+3°623	-7°629	64 2211	9.5	9	+23°137	-13°368			9	+36°381	-0°401		
9	-13°256	-33°296			11	+4°587	-8°973	65 2185	9.6	9	+23°323	-18°392			11	+36°497	-29°906	65 2227	9.8
9	-13°243	-41°532			9	+5°242	-50°764			9	+23°696	-49°675			9	+37°030	-9°017		
9	-13°222	-45°623			9	+5°668	-53°769			9	+23°850	-19°194			9	+37°379	-32°998		
9	-12°892	-29°847			11	+6°409	-53°368	65 2186	9.8	11	+24°571	-42°904	65 2204	9.9	10	+37°930	-35°893		
	921					981					1041					1101			
9	-12°681	-7°044	64 2172	9.7	28	+7°133	-9°023	65 2187	9.0	20	+24°806	-60°269	65 2205	9.0	9	+37°985	-2°711		
10	-12°449	-22°542	65 2153	10.0	9	+7°164	-53°039			9	+24°920	-41°075			9	+38°112	-38°876		
10	-12°306	-14°991	65 2154	10.0	9	+7°391	-27°272			20	+25°105	-64°788	65 2208	9.3	9	+38°694	-44°124		
9	-12°273	-13°425	65 2155	9.9	17	+8°235	-28°578	65 2188	9.3	9	+25°416	-44°604			16	+38°717	-57°828	65 2229	9.5
9	-11°802	-15°169	65 2157	9.9	9	+8°410	-17°221			26	+25°522	-32°702	65 2207	9.0	10	+38°894	-35°648		
9	-11°771	-49°324			9	+8°806	-13°826			10	+25°550	-14°500	65 2206	9.9	9	+39°004	-59°891		
31	-11°611	-20°800	65 2156	8.1	9	+8°922	-11°372			9	+25°862	-12°073	65 2209	9.9	17	+39°081	-38°721	65 2228	9.3
9	-11°343	-21°338			9	+9°711	-64°191			9	+26°026	-30°277			11	+39°214	-61°138	65 2232	9.7
10	-11°232	-40°379	65 2158	9.9	9	+9°862	-10°806	65 2189	9.9	14	+26°027	-0°648	64 2271	9.6	9	+39°378	-8°049		
9	-10°995	-58°376			14	+10°100	-40°626	65 2190	9.5	9	+26°261	-42°032			9	+39°590	-62°164		
	931					991					1051					1111			
11	-10°864	-49°146	65 2159	9.9	10	+10°278	-36°046			14	+26°710	-14°477	65 2210	9.6	9	+39°693	-32°904		
9	-10°659	-22°620			9	+10°631	-37°871			21	+27°159	-26°096	65 2211	8.9	10	+39°829	-10°582		
9	-10°068	-26°122			9	+11°011	-0°701			10	+27°196	-2°459	64 2273	9.9	17	+40°009	-15°782	65 2230	9.2
9	-9°932	-63°450			11	+11°044	-11°651	65 2191	9.6	9	+27°934	-23°817	65 2212	9.8	9	+40°251	-30°226		
10	-9°923	-34°611	65 2160	9.8	11	+11°374	-45°743	65 2192	9.9	9	+28°003	-23°797			15	+41°649	-40°178	65 2233	9.4
9	-9°729	-34°591			9	+11°427	-35°277			9	+28°087	-38°764			9	+42°364	-0°081		
9	-9°583	-44°189			9	+12°891	-9°449	65 2193	9.9	10	+28°096	-24°257	65 2213	9.9	9	+42°425	-13°156		
10	-9°508	-45°015			9	+12°975	-23°505			11	+28°387	-4°896	64 2278	9.8	9	+43°057	-16°785		
9	-9°453	-44°525			10	+13°315	-60°089			11	+28°485	-32°247	65 2214	9.7	11	+43°284	-26°786	65 2235	9.7
9	-9°256	-37°971	65 2161	9.9	9	+14°910	-9°355			9	+28°780	-29°535			9	+43°385	-13°989		
	941					1001					1061					1121			
9	-8°859	-44°844			9	+14°991	-9°875	65 2194	9.9	9	+28°913	-29°592			12	+43°431	-43°200	65 2236	9.7
9	-8°052	-24°681	65 2164	9.9	10	+15°787	-52°585			9	+28°938	-26°470			12	+43°465	-13°818	65 2234	9.5
29	-8°051	-0°296	64 2186	8.9	12	+15°872	-63°654	65 2195	9.8	9	+29°132	-46°783			10	+43°608	-3°527		
18	-7°982	-28°980	65 2163	9.2	9	+15°931	-13°242			9	+29°372	-18°840			9	+43°913	-30°202		
9	-7°525	-50°588			9	+16°011	-10°328			12	+29°386	-30°981	65 2216	9.7	9	+43°991	-32°223		
11	-7°410	-34°253	65 2165	9.8	10	+16°999	-37°856			10	+29°561	-22°516			16	+44°386	-37°035	65 2237	9.3
12	-7°087	-10°207	65 2167	9.6	10	+17°022	-27°986	65 2196	9.8	9	+29°612	-5°301			9	+44°602	-46°897		
12	-6°978	-25°248	65 2168	9.5	16	+17°044	-48°825	65 2197	9.3	11	+29°668	-34°963			10	+45°172	-46°650		
11	-6°911	-59°844	65 2166	9.8	9	+17°174	-31°090			14	+29°886	-45°364	65 2217	9.4	9	+45°437	-6°853		
13	-6°302	-61°399	65 2169	9.7	9	+17°315	-39°488			10	+30°117	-5°405			9	+45°634	-31°920		

C.P.D.					C.P.D.					C.P.D.					C.P.D.									
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.					
	1131,					1191,				PLATE CENTRE. 13 ^h 21 ^m , - 65°. Plate 735. 1893, June 5. PROVISIONAL CONSTANTS. <i>a</i> = - .01145 <i>d</i> = - .00051 <i>b</i> = + .00040 <i>e</i> = - .01139 <i>c</i> = + .0326 <i>f</i> = + .0091 To obtain standard co-ordinates, $\xi \eta$ $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						51,								
10	+45.696	-28.644			9	+57.330	-47.105			14	-46.023	+39.315	64	2354	9.3									
9	+45.923	- 8.925			9	+57.436	-39.383			10	-45.804	+34.449												
11	+46.647	- 8.514			9	+57.624	-15.773			9	-45.698	+36.877												
10	+46.796	-27.621			9	+57.988	-42.703			9	-45.346	+38.819												
9	+47.242	-39.076			9	+58.178	-24.560			9	-45.011	+47.351												
9	+47.340	-34.370			9	+58.497	-41.073			14	-44.506	+ 1.587	64	2355	9.4									
18	+47.461	- 5.279	64	2319	9.2	9	+58.761	-25.597		9	-44.415	+39.522												
9	+47.500	-31.854			12	+58.945	-25.944	65	2250	9.7	9	-44.268	+40.672											
10	+48.026	-33.422			9	+59.153	-30.175			14	-44.224	+57.171	63	2706	9.2									
9	+48.224	-25.544			11	+59.316	-19.307	65	2251	9.7	10	-43.774	+16.136											
	1141					1201						61												
11	+48.492	-16.621	65	2238	9.9	11	+59.398	-47.753	65	2252	9.7	11	-43.267	+44.149	64	2358	9.6							
11	+48.606	-62.088	65	2239	9.8	9	+59.557	-25.981			13	-63.849	+56.600	63	2682	9.1	14	-43.038	+18.238	64	2357	9.5		
9	+48.896	-39.857			9	+59.626	-45.141			11	-63.823	+ 5.554	64	2326	9.6	10	-42.509	+37.332						
12	+48.917	-52.226	65	2240	9.8	9	+59.705	-13.482			9	-63.714	+24.813			9	-42.450	+55.074						
17	+49.165	-50.260	65	2241	9.3	10	+59.784	-53.005	65	2254	9.8	10	-63.707	+61.481	63	2683	9.5	11	-42.340	+25.606				
9	+49.286	-38.417			9	+60.289	-10.651			9	-62.947	+ 4.542				10	-41.971	+45.763	64	2359	9.9			
9	+49.469	-35.468			9	+60.410	-14.667			12	-62.222	+ 5.490	64	2330	9.5	11	-41.406	+ 3.452						
10	+49.582	-13.380			9	+60.645	-25.525			9	-62.018	+51.719	63	2685	9.9	9	-41.252	+18.948						
10	+49.595	-21.781			20	+60.766	-14.793	65	2253	9.2	9	-61.790	+ 0.332			10	-40.754	+18.748						
10	+49.883	-21.557			9	+60.797	-19.627			9	-61.709	+ 9.222				12	-40.573	+ 7.672	64	2360	9.6			
	1151					1211						11	-61.697	+42.707	64	2332	9.5	15	-40.157	+41.024	64	2364	9.3	
9	+50.116	-27.322			9	+60.834	-24.862			9	-61.495	+ 4.005				19	-40.146	+21.428	64	2363	9.1			
11	+50.201	-38.389			18	+61.168	-61.510	65	2255	9.2	10	-60.823	+41.013	64	2334	9.5	11	-40.131	+ 1.627	64	2361	9.9		
9	+50.667	-15.879			9	+61.210	-13.033			9	-60.763	+ 4.888				11	-39.911	+ 8.885	64	2362	9.8			
11	+50.925	-20.174			9	+62.804	-27.710			11	-60.718	+60.547	63	2688	9.5	9	-39.464	+26.672						
10	+50.941	-10.069			9	+62.908	-48.835																	
9	+50.984	-27.847			11	+62.973	-33.199	65	2256	9.9	13	-59.515	+49.492	64	2337	9.2	10	-39.088	+ 0.683					
11	+51.020	-26.418			10	+63.014	-29.146	65	2257	9.9	10	-59.503	+ 1.886			10	-39.049	+23.974						
11	+51.038	- 7.906			18	+63.438	-24.932	65	2258	8.8	9	-59.369	+60.240	63	2689	9.8	18	-38.512	+28.577	64	2366	9.2		
9	+51.062	-31.390			11	+63.562	-35.372			11	-59.061	+20.197	64	2335	9.5	20	-37.830	+53.552	63	2716	8.6			
9	+51.166	-10.526			11	+63.617	- 1.406	64	2344	9.8	10	-58.567	+45.692	64	2338	9.9	10	-37.661	+30.352					
	1161					1221						21												
9	+51.354	-41.056			11	+64.078	- 9.488			11	-58.175	+57.115	63	2690	9.2	15	-37.659	+45.300	64	2367	9.2			
19	+51.505	-56.116	65	2242	9.2	10	+64.090	-39.053			9	-58.036	+12.911			11	-37.586	+53.676	63	2718	9.8			
11	+51.746	-25.394			9	+64.406	- 1.180			9	-57.972	+22.935			9	-37.436	+53.934							
9	+52.046	- 4.457			10	+64.458	- 8.425	64	2346	9.9	11	-57.002	+ 5.030	64	2339	9.7	10	-36.679	+17.220					
10	+52.264	- 7.299			9	+64.461	- 7.595			10	-56.145	+33.669	64	2341	9.8	9	-36.141	+33.317						
9	+52.408	- 5.017			10	+64.593	-23.872	65	2260	9.9	12	-55.968	+12.959	64	2340	9.5	9	-35.495	+28.506					
12	+52.650	- 8.107	64	2329	9.5	12	+64.633	-30.315	65	2261	9.5	10	-55.581	+58.642	63	2693	9.6	12	-35.281	+22.674	64	2369	9.8	
10	+52.718	-16.414	65	2243	9.9	10	+64.727	-10.411	65	2259	9.9	10	-54.831	+17.925			14	-35.203	+10.004	64	2368	9.5		
9	+52.774	- 5.319										9	-54.264	+48.961			9	-34.806	+29.004					
9	+52.925	-18.528										9	-53.412	+27.078			9	-34.604	+25.770					
	1171											31												
12	+53.064	-27.736	65	2244	9.7							17	-53.411	+18.463	64	2343	9.2	15	-34.495	+ 1.727	64	2370	9.4	
9	+53.102	-35.035										14	-53.308	+ 3.873	64	2342	9.3	11	-34.053	+32.195				
9	+53.141	-55.906	65	2246	9.9							9	-52.378	+34.271			12	-33.723	+35.859	64	2372	9.7		
9	+53.324	-27.836										10	-52.267	+36.973			10	-33.648	+11.469					
12	+53.350	-43.085	65	2245	9.5							9	-52.139	+33.943			11	-32.928	+31.531					
9	+53.482	-29.752										14	-51.954	+29.947	64	2345	9.3	11	-31.940	+22.446				
9	+53.869	- 0.225										9	-50.887	+32.117			15	-31.890	+42.079	64	2373	9.3		
14	+53.966	- 5.941	64	2331	9.5							9	-50.859	+13.234			9	-31.749	+23.839					
9	+54.498	- 5.459										10	-50.695	+ 3.374			11	-31.245	+26.738	64	2374	9.8		
9	+54.595	-17.831										9	-50.236	+59.548	63	2699	9.7	9	-31.182	+22.504				
	1181											41												
11	+55.423	-32.969	65	2247	9.9							13	-49.973	+ 6.544	64	2347	9.3	11	-31.180	+28.046				
11	+55.526	- 4.199	64	2333	9.9							11	-49.426	+ 8.185	64	2348	9.8	10	-30.894	+15.080				
9																								

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
9	-28.713	+59.412			2	-13.283	+60.491	63 2745	9.7	10	+2.830	+33.040			11	+22.437	+17.566		
13	-28.514	+41.381	64 2380	9.7	11	-13.270	+18.596			10	+3.862	+28.189			18	+22.783	+63.301	63 2789	9.0
12	-28.490	+23.716	64 2379	9.9	10	-13.128	+42.153	64 2397	9.5	9	+3.938	+28.868			9	+22.836	+2.238		
9	-27.643	+42.779			10	-13.102	+14.410			9	+4.054	+41.918			9	+22.875	+25.686		
11	-27.619	+29.495			10	-12.953	+17.071			12	+5.405	+45.961	64 2415	9.8	14	+23.519	+25.741	64 2438	9.4
9	-27.128	+27.193			10	-12.863	+25.807			10	+5.461	+38.000			9	+23.559	+58.355		
9	-26.849	+20.645			9	-12.511	+26.774			9	+5.627	+8.014			10	+23.952	+26.038		
18	-26.837	+18.638	64 2383	9.1	10	-12.492	+26.804			9	+5.737	+46.197			17	+25.315	+38.829	64 2439	9.2
14	-26.653	+45.433	64 2385	9.3	10	-12.321	+25.968			10	+6.234	+21.964			9	+25.566	+32.834		
11	-26.469	+2.219			10	-12.008	+27.096			9	+6.439	+55.711			10	+25.892	+50.623		
	121					181					241					301			
19	-26.427	+13.594	64 2384	9.1	21	-11.786	+11.620	64 2398	9.0	10	+7.181	+39.249			10	+26.088	+1.404		
9	-26.293	+18.003			11	-11.667	+26.151			9	+7.209	+47.981			48	+26.132	+11.588	64 2441	7.1
11	-26.165	+19.534			14	-11.652	+30.110	64 2399	9.4	10	+8.173	+44.354			19	+26.349	+40.507	64 2440	9.0
11	-25.765	+18.294			11	-11.599	+45.483			56	+8.705	+51.119	64 2418	7.0	16	+26.461	+3.582	64 2442	9.3
9	-25.757	+55.350			10	-11.416	+20.509			18	+9.014	+26.748			10	+26.629	+33.814		
10	-25.345	+52.052			11	-11.305	+47.415			12	+9.076	+27.994	64 2419	9.0	10	+26.800	+0.422		
9	-25.217	+0.773			16	-11.294	+32.518	64 2400	9.2	11	+9.118	+32.024			9	+26.870	+56.000		
60	-24.791	+59.752	63 2732	6.2	9	-11.020	+51.399			9	+9.410	+62.925			9	+27.027	+58.964		
10	-24.455	+35.664			13	-11.016	+44.891			9	+9.427	+27.830	64 2421	9.7	9	+27.094	+58.244		
16	-24.452	+37.532	64 2386	9.2	9	-10.886	+60.314			12	+9.543	+48.369	64 2420	9.8	9	+27.372	+3.196		
	131					191					251					311			
9	-24.042	+53.331			10	-10.819	+41.559			10	+9.767	+3.464			11	+27.510	+10.649	64 2444	9.9
9	-23.916	+7.702			11	-10.759	+19.972	64 2401	9.8	12	+10.186	+11.017	64 2422	9.8	11	+27.589	+59.624		
11	-22.846	+18.547			11	-10.440	+46.412			14	+10.447	+37.943	64 2423	9.5	9	+27.706	+6.890		
10	-22.328	+45.162			9	-9.496	+59.521			13	+10.447	+32.950	64 2424	9.6	10	+27.744	+24.145		
9	-21.730	+46.706			11	-9.457	+47.574			10	+10.560	+19.221			18	+27.840	+38.720	64 2443	9.2
10	-21.435	+37.597			9	-9.124	+54.595			10	+10.563	+30.645			10	+28.169	+58.042		
9	-21.380	+53.233			11	-8.684	+54.679			10	+10.983	+17.144			10	+28.221	+48.589		
10	-20.944	+45.974			9	-8.596	+56.523			20	+11.224	+64.174	63 2779	8.3	10	+28.360	+43.518		
10	-20.894	+60.682	63 2737	9.8	10	-8.174	+16.971			11	+11.751	+37.715			10	+28.390	+31.042		
11	-20.633	+27.819	64 2388	9.9	11	-7.684	+16.051	64 2404	9.9	16	+11.977	+35.859	64 2426	9.3	13	+28.393	+35.536	64 2446	9.6
	141					201					261					321			
9	-20.502	+14.084			9	-7.400	+58.227			17	+12.027	+2.830	64 2427	9.2	13	+28.461	+49.923	64 2445	9.3
11	-20.414	+50.661	64 2389	9.9	9	-6.909	+16.203			10	+12.328	+31.835			13	+28.614	+61.458	63 2800	9.5
10	-20.363	+28.033			9	-6.861	+37.249			9	+12.408	+64.892			23	+28.731	+33.638	64 2448	8.4
10	-19.910	+47.231			10	-6.702	+15.767			9	+12.588	+37.163			10	+28.798	+15.828		
11	-19.463	+1.691	64 2390	9.8	9	-6.617	+57.259			40	+12.850	+0.890	64 2428	7.9	16	+28.807	+47.545	64 2447	9.2
21	-19.239	+44.328	64 2392	8.8	12	-6.547	+10.739	64 2405	9.9	10	+14.652	+26.911			10	+29.058	+31.548		
12	-18.687	+17.976	64 2393	9.6	9	-6.102	+26.310			9	+14.743	+39.165			13	+29.298	+57.142	63 2802	9.6
10	-18.539	+37.650			14	-6.067	+63.184	63 2751	9.2	9	+14.861	+15.083			9	+29.330	+35.062		
12	-18.292	+51.952			17	-5.298	+16.527	64 2406	9.2	10	+15.016	+38.773			18	+29.380	+58.057	63 2803	9.2
10	-17.807	+37.520			9	-4.774	+18.384			14	+15.963	+8.394	64 2429	9.3	9	+29.784	+0.680		
	151					211					271					331			
18	-17.333	+53.347	63 2741	9.1	10	-4.515	+52.270			10	+16.234	+63.816			12	+30.032	+25.509	64 2450	9.9
14	-17.328	+21.032	64 2394	9.6	11	-4.478	+42.598			9	+16.788	+43.476			12	+30.074	+42.637	64 2449	9.6
10	-16.786	+35.282			11	-4.445	+59.652	63 2752	9.9	9	+16.883	+19.795			13	+30.362	+27.005	64 2451	9.7
9	-16.521	+40.602			11	-4.340	+63.098	63 2753	9.7	13	+17.030	+6.500	64 2431	9.5	10	+30.792	+32.619		
56	-16.467	+62.852	63 2743	6.1	12	-3.770	+7.266	64 2407	9.7	14	+17.101	+8.896	64 2432	9.4	11	+30.851	+19.503		
10	-16.253	+32.976			22	-3.536	+26.653	64 2408	8.5	11	+17.183	+54.219			16	+30.887	+16.348	64 2452	9.3
10	-16.108	+27.079			10	-3.028	+28.004			10	+17.492	+44.674			9	+30.960	+23.108		
9	-15.594	+14.567			11	-2.299	+50.558	64 2410	9.9	16	+17.630	+23.395	64 2433	9.3	9	+31.093	+9.425		
14	-15.419	+32.990	64 2395	9.4	10	-1.848	+40.965			11	+18.271	+17.693			9	+31.564	+41.939	64 2453	9.8
9	-15.401	+42.853			11	-1.802	+18.573			10	+18.307	+60.341			10	+31.580	+1.422		
	161					221					281					341			
10	-14.894	+18.970			15	-1.516	+35.020	64 2411	9.3	9	+18.652	+39.007			10	+31.667	+31.986		
10	-14.687	+22.365			9	-1.216	+15.959			12	+18.980	+39.564	64 2434	9.9	12	+31.700	+40.935		
10	-14.570	+58.875			14	-1.195	+37.152	64 2412	9.3	9	+19.341	+63.696			9	+32.043	+13.568		
9	-14.250	+12.845			11	-0.876	+46.570			12	+19.533	+29.700	64 2435	9.9	14	+32.106	+39.053	64 2454	9.6
9	-13.997	+45.999			9	-0.092	+53.194			9	+19.771	+1.586			20	+32.144	+9.666	64 2455	9.3
11	-13.791	+48.870	64 2396	9.9	9	-0.090	+26.072			15	+19.785	+0.321	64 2436	9.4	9	+32.299	+62.470		
9	-13.696	+12.534			10	+1.958	+35.116			10	+21.023	+40.934			14	+33.120	+52.822	63 2809	9.5
9	-13.652	+53.007			10	+2.400	+61.699			9	+21.101	+19.285			14	+33.157	+61.960	63 2808	9.2
10	-13.549	+38.968			15	+2.416	+47.804	64 2413	9.3	12	+21.165	+27.980	64 2437	9.9	11	+33.724	+18.293		
10	-13.312	+46.799			13	+2.443	+52.070			9	+21.888	+18.677			14	+33.732	+44.257	64 2456	9.4

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Max.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
10	+33°860	+24°754			9	+48°618	+23°331			10	-62°448	-62°656	65 2239	9°8	30	-44°919	-61°685	65 2267	9°0
9	+34°048	+49°208			10	+48°704	+16°752			12	-62°277	-8°527	64 2329	9°5	20	-44°892	-35°821	65 2268	9°0
15	+34°071	+40°207	64 2457	9°3	12	+48°798	+18°214	64 2474	9°7	9	-61°934	-25°834			10	-44°664	-44°257		
15	+34°190	+37°529	64 2458	9°3	9	+48°799	+30°719			11	-61°620	-16°801	65 2243	9°9	10	-44°213	-18°689		
10	+34°454	+39°278			12	+49°352	+36°805	64 2475	9°6	10	-61°259	-18°898			10	-43°545	-26°190		
9	+34°540	+22°512			9	+49°601	+29°107			10	-61°197	-41°475			15	-42°843	-50°751	65 2271	9°5
10	+34°803	+14°114			9	+49°663	+18°865			12	-61°124	-6°264	64 2331	9°5	9	-42°813	-50°325	65 2272	9°9
13	+34°904	+26°227	64 2460	9°7	34	+49°876	+21°138	64 2476	8°2	12	-60°450	-28°081	65 2244	9°7	16	-42°714	-2°022	64 2356	9°0
11	+35°074	+18°389			31	+50°212	+10°622	64 2477	7°9	17	-59°993	-56°490	65 2242	9°2	9	-42°681	-12°137		
11	+35°263	+9°270			9	+51°217	+17°191			12	-59°690	-4°421	64 2333	9°9	29	-42°619	-63°998	65 2270	9°0
	361					421					481					541			
15	+35°336	+39°743	64 2461	9°3	14	+51°249	+25°880	64 2478	9°5	9	-59°652	-18°077			9	-42°602	-4°854		
10	+35°550	+10°858			9	+51°277	+21°165			9	-59°120	-3°270			9	-42°349	-23°008		
11	+35°805	+28°356	64 2462	9°6	10	+51°463	+23°827			14	-59°082	-43°363	65 2245	9°5	9	-42°133	-14°860		
15	+36°299	+39°067	64 2464	9°3	9	+51°551	+43°253			14	-58°391	-10°783	65 2248	9°4	10	-41°506	-25°717		
9	+36°335	+48°096			10	+51°608	+22°084			11	-58°374	-56°157	65 2246	9°9	10	-41°352	-48°563		
10	+36°386	+45°013	64 2463	9°9	10	+52°082	+37°732	64 2480	9°9	14	-57°916	-14°713	65 2249	9°4	11	-41°250	-36°893	65 2274	9°9
15	+37°033	+56°778	63 2814	9°2	10	+52°156	+62°814	63 2844	9°6	13	-57°876	-4°727	64 2336	9°7	15	-41°130	-37°223	65 2275	9°5
32	+37°687	+45°158	64 2466	8°2	10	+52°271	+15°057			11	-57°713	-33°125	65 2247	9°9	9	-40°550	-21°203		
11	+37°707	+44°230			23	+52°711	+35°771	64 2481	8°6	10	-57°165	-27°153			9	-40°268	-31°191		
9	+38°341	+41°700			10	+52°970	+1°353			10	-55°264	-39°374			12	-40°108	-28°461	65 2277	9°9
	371					431					491					551			
18	+38°418	+19°884	64 2468	9°0	9	+53°911	+48°609			9	-54°872	-13°373			11	-40°030	-1°979		
11	+39°007	+7°610			14	+54°003	+50°811	64 2482	9°2	12	-54°834	-19°208	65 2251	9°7	15	-39°657	-55°308	65 2276	9°5
10	+39°166	+33°356			13	+54°289	+53°739	63 2846	9°5	12	-54°730	-25°863	65 2250	9°7	12	-38°927	-12°043		
10	+39°317	+55°904			9	+54°327	+16°646			9	-54°495	-42°051			12	-38°893	-4°270		
13	+39°496	+32°176	64 2469	9°9	9	+55°223	+60°318	63 2847	9°9	9	-54°220	-30°063			13	-38°866	-12°073	65 2280	9°2
9	+39°797	+55°354			9	+55°443	+22°828			9	-54°110	-25°851			9	-38°807	-36°781		
10	+40°858	+19°907			10	+55°957	+52°195	63 2848	9°5	9	-54°066	-14°516	65 2253	9°2	30	-38°556	-31°357	65 2279	8°4
11	+41°212	+3°797			9	+56°192	+41°006			16	-53°709	-14°614			11	-38°453	-10°540	65 2282	9°9
9	+41°063	+38°756			12	+56°528	+30°920	64 2483	9°9	9	-53°390	-12°822			26	-38°269	-59°206	65 2278	9°2
30	+41°667	+9°743	64 2470	8°4	9	+56°758	+55°073			10	-53°323	-19°434			14	-38°171	-6°044	64 2365	9°4
	381					441					501					561			
11	+41°732	+17°639			9	+56°890	+58°837			10	-53°057	-25°324			9	-38°137	-36°717		
10	+41°797	+19°345			9	+56°929	+10°913			9	-52°916	-24°647			9	-38°106	-21°415		
9	+42°473	+54°473			10	+57°337	+17°732			13	-52°723	-47°586	65 2252	9°7	10	-38°078	-30°049		
10	+42°600	+32°823			9	+57°479	+50°520			10	-52°688	-44°974			11	-38°055	-48°337		
10	+42°866	+33°436			9	+57°746	+41°493			12	-51°955	-52°790	65 2254	9°8	10	-38°051	-29°876	65 2281	9°9
10	+43°271	+44°955			10	+57°933	+5°649			13	-51°816	-1°053	64 2344	9°8	18	-37°312	-31°382	65 2283	9°1
10	+43°368	+6°710			9	+58°101	+16°964			9	-51°050	-0°763			27	-37°187	-25°014	65 2285	8°8
12	+43°447	+35°694	64 2471	9°7	13	+59°107	+11°179	64 2484	9°5	10	-50°782	-9°086			12	-37°122	-26°332	65 2286	9°8
10	+43°852	+12°365			9	+59°558	+31°232			11	-50°478	-7°996	64 2346	9°9	12	-36°938	-45°740	65 2284	9°9
9	+44°000	+58°832	63 2829	9°8	9	+59°813	+2°297			11	-50°434	-28°765	65 2257	9°9	10	-36°299	-37°302		
	391					451					511					571			
11	+44°022	+22°673			15	+60°046	+52°056	63 2854	9°0	20	-50°318	-24°529	65 2258	8°8	12	-35°754	-27°692		
9	+44°058	+16°327			10	+60°082	+9°913			12	-50°174	-32°809	65 2256	9°9	11	-35°751	-3°080		
13	+44°107	+54°808	63 2830	9°5	20	+60°308	+5°773	64 2486	8°5	11	-50°064	-9°962	65 2259	9°9	10	-35°704	-31°385		
15	+44°243	+58°244	63 2831	9°1	14	+61°112	+1°532	64 2488	9°5	17	-49°967	-61°175	65 2255	9°2	13	-35°654	-51°685	65 2288	9°8
10	+44°410	+17°237			11	+61°361	+47°849	64 2485	9°5	11	-49°451	-34°940			10	-35°638	-36°975		
10	+44°432	+9°308			11	+61°725	+58°758	63 2858	9°6	11	-49°257	-23°389	65 2260	9°9	10	-35°387	-64°356	65 2287	9°9
10	+44°490	+18°411			36	+61°726	+33°776	64 2487	7°6	9	-49°206	-4°450			10	-35°343	-3°388		
14	+44°706	+59°146	63 2832	9°2	9	+62°568	+17°171			14	-48°744	-29°822	65 2261	9°5	17	-35°302	-39°075	65 2291	9°4
10	+44°908	+56°654			11	+62°987	+19°049			11	-48°672	-38°561			10	-35°285	-33°979		
10	+45°908	+40°847			9	+63°474	+25°811			14	-47°296	-11°726	65 2264	9°5	10	-35°054	-8°550		
	401					461					521					581			
10	+45°911	+33°399			9	+63°502	+6°265			11	-47°217	-36°754	65 2262	9°9	9	-34°888	-11°801		
10	+46°244	+51°394	64 2472	9°8	10	+64°103	+44°921	64 2489	9°7	14	-47°167	-20°746	65 2263	9°5	12	-34°846	-15°433	65 2293	9°7
9	+46°467	+30°147			9	+64°917	+63°342	63 2864	9°6	10	-46°773	-19°812			13	-34°320	-17°657	65 2295	9°6
9	+46°574	+52°439			10	-63°894	-8°439			12	-46°553	-32°026	65 2265	9°9	10	-34°276	-59°930		
10	+47°197	+61°314	63 2836*	9°9	9	-63°834	-10°602			12	-46°345	-16°352	65 2266	9°6	14	-34°227	-3°518	64 2371	9°5
9	+47°560	+10°419			13	-62°845	-52°792	65 2240	9°8	12	-46°249	-0°524	64 2353	9°9	13	-34°220	-8°792	65 2298	9°3
11	+47°717	+28°831			17	-62°737	-50°823	65 2241	9°3	11	-45°539	-29°984			12	-34°195	-17°851	65 2296	9°8
14	+47°819	+18°003	64 2473	9°6	9	-62°718	-7°750			10	-45°349	-11°830			11	-34°038	-18°219	65 2297	9°6
9	+48°302	+12°800			9	-62°598	-26°910			11	-45°138	-42°563			9	-33°882	-23°705		
10	+48°569	+17°538			10	-62°555	-38°904			12	-44°925	-13°741	65 2269	9°9	9	-33°471	-51°543		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591,					651,					711,					771,			
10	-31°336	-7°869			13	-14°862	-31°351	65 2320	9°6	9	+3°821	-54°005			11	+19°459	-50°705		
11	-31°060	-20°515			10	-14°768	-2°591			9	+4°086	-30°572			12	+19°800	-29°277	65 2353	9°9
15	-30°937	-41°602	65 2299	9°5	16	-14°462	-46°602	65 2321	9°3	13	+4°721	-31°455	65 2339	9°5	11	+19°849	-45°635		
10	-30°787	-43°038			9	-13°901	-57°039			18	+4°828	-49°411	65 2338	9°2	11	+20°855	-21°764		
11	-30°695	-37°227	65 2300	9°9	11	-12°655	-60°095			12	+4°916	-41°819	65 2340	9°7	11	+20°891	-37°687		
10	-30°587	-43°112			10	-12°586	-2°935			11	+5°065	-6°954	64 2414	9°9	9	+21°102	-41°399		
11	-30°452	-26°358			9	-12°427	-52°543			10	+5°116	-13°927			10	+21°324	-37°301		
11	-29°847	-60°976			12	-12°028	-42°631	65 2323	9°9	11	+5°727	-42°949			10	+21°354	-49°688		
11	-29°648	-45°975			13	-11°707	-24°156	65 2324	9°5	11	+7°035	-3°151	64 2416	9°6	30	+21°603	-64°563	65 2358	8°8
9	-29°409	-51°019			10	-11°242	-22°288			9	+7°066	-12°630			19	+21°632	-44°667	65 2356	9°0
	601					661					721					781			
11	-29°225	-28°449			9	-10°977	-24°921			11	+7°118	-9°408	65 2342	9°9	12	+21°684	-20°876	65 2354	9°9
14	-29°162	-44°801	65 2301	9°5	9	-10°864	-47°691			30	+7°584	-33°750	65 2343	8°8	20	+21°722	-43°977	65 2357	9°0
13	-28°910	-44°433	65 2302	9°4	28	-9°977	-63°957	65 2325	8°7	9	+7°760	-8°996			11	+21°943	-49°344		
11	-28°761	-7°625	64 2377	9°7	11	-9°548	-23°314	65 2326	9°9	23	+7°930	-34°050	65 2344	9°1	20	+21°965	-11°457	65 2355	9°1
14	-28°532	-36°023	65 2303	9°7	12	-9°402	-31°014	65 2327	9°8	12	+8°001	-48°051	65 2345	9°9	9	+22°150	-18°329		
10	-28°498	-49°562			10	-9°298	-19°745			11	+8°429	-62°403			9	+22°646	-46°917		
11	-27°948	-44°103			11	-9°195	-42°539			12	+8°483	-2°032	64 2417	9°5	9	+23°056	-48°658		
12	-27°764	-36°139	65 2304	9°9	12	-9°048	-62°999	65 2328	9°9	10	+8°790	-33°542			9	+23°348	-2°122		
11	-27°609	-2°274	64 2381	9°9	11	-8°542	-31°223			10	+8°811	-40°209			9	+24°254	-1°214		
10	-27°069	-40°279			18	-8°401	-7°252	64 2402	9°1	10	+8°852	-31°648			10	+25°348	-14°038		
	611					671					731					791			
10	-26°995	-23°383			30	-8°168	-19°638	65 2329	8°4	9	+9°160	-10°595			11	+25°414	-48°425		
13	-26°919	-3°430	64 2382	9°6	12	-8°153	-7°849	64 2403	9°6	10	+9°841	-46°035			12	+25°427	-19°597		
11	-26°771	-41°526	65 2305	9°9	11	-7°968	-42°165			11	+10°682	-31°127			12	+26°280	-49°807		
12	-26°149	-40°221			11	-7°478	-43°325			10	+10°767	-53°609			12	+26°672	-10°926	65 2359	9°9
10	-26°025	-44°113			9	-7°337	-27°025			10	+10°828	-26°082			10	+26°689	-58°573		
10	-25°800	-37°733			11	-7°333	-48°956			11	+10°932	-55°021			14	+27°160	-36°127	65 2360	9°6
11	-25°763	-5°468			10	-7°315	-15°243			11	+11°678	-47°187			9	+27°203	-36°457		
13	-25°730	-45°910	65 2306	9°6	9	-7°140	-59°338			11	+11°748	-4°899	64 2425	9°9	13	+27°325	-52°609	65 2361	9°9
14	-25°638	-45°696	65 2307	9°6	11	-6°394	-33°929			11	+11°882	-47°393			18	+27°074	-37°410	65 2362	9°4
10	-24°899	-26°213			12	-6°393	-10°495	65 2330	9°8	10	+11°970	-41°525			10	+27°826	-37°716		
	621					681					741					801			
11	-24°641	-7°503			9	-6°290	-2°755			10	+12°064	-30°393			18	+27°966	-33°580	65 2363	9°3
10	-24°527	-20°821			9	-6°085	-25°861			10	+12°284	-42°163			9	+28°352	-39°505		
11	-23°911	-60°233			9	-5°835	-30°901			12	+12°350	-54°151			11	+28°702	-42°688		
9	-23°688	-41°299			16	-5°123	-12°703	65 2331	9°2	13	+12°497	-48°039	65 2346	9°5	13	+29°184	-62°344	65 2364	9°6
12	-23°226	-40°537	65 2308	9°9	12	-4°929	-43°025	65 2332	9°9	9	+12°661	-4°268			9	+29°489	-57°225		
12	-23°146	-32°784	65 2309	9°7	10	-4°635	-3°499			11	+13°034	-31°599			13	+30°053	-43°920	65 2365	9°5
17	-22°673	-7°064	64 2387	9°0	11	-4°194	-4°693			10	+13°460	-40°881			16	+30°433	-52°799	65 2366	9°4
10	-22°268	-35°534			10	-3°491	-29°058			16	+13°680	-52°917	65 2347	9°5	16	+30°826	-30°563	65 2367	9°5
10	-22°247	-43°899			9	-3°198	-54°327			13	+14°329	-63°847	65 2348	9°7	11	+31°066	-64°212		
11	-21°235	-62°012	65 2310	9°9	9	-2°838	-7°216			10	+15°048	-23°053			11	+31°230	-17°082		
	631					691					751					811			
10	-21°229	-62°263			11	-2°737	-4°736	64 2409	9°9	10	+15°066	-13°656	65 2349	9°9	11	+31°721	-50°291		
12	-21°013	-44°851	65 2311	9°9	10	-2°620	-1°573			11	+15°410	-24°234			10	+31°962	-33°937		
14	-19°687	-48°684	65 2312	9°9	11	-1°264	-52°762			13	+15°543	-51°357	65 2350	9°9	10	+32°554	-64°356		
12	-19°644	-50°722	65 2313	9°9	11	-1°185	-31°466			16	+15°948	-47°497	65 2351	9°4	9	+32°843	-44°489		
11	-19°345	-33°533			12	-0°716	-52°243	65 2333	9°9	11	+16°480	-7°262	64 2430	9°9	11	+33°962	-63°391		
16	-19°135	-25°375	65 2314	9°1	12	-0°681	-49°717			12	+16°626	-35°309			11	+34°117	-30°058		
18	-19°052	-2°642	64 2391	9°1	11	-0°622	-50°103			9	+16°658	-1°000			15	+34°235	-2°071	64 2459	9°4
13	-18°381	-22°920	65 2315	9°5	12	-0°381	-49°331	65 2334	9°9	12	+16°794	-38°851			11	+34°315	-28°271		
11	-17°717	-26°503			10	-0°063	-1°873			9	+16°814	-19°625			30	+35°424	-52°156	65 2369	8°6
10	-17°531	-62°507			11	+0°540	-48°374			11	+16°859	-42°748			11	+35°514	-9°256		
	641					701					761					821			
11	-17°345	-34°521	65 2316	9°9	9	+0°613	-10°606			11	+16°904	-41°067			10	+35°628	-7°855		
25	-16°789	-23°692	65 2317	8°9	11	+1°092	-60°441			11	+17°106	-22°059	65 2352	9°9	12	+35°740	-16°317	65 2368	9°9
10	-16°667	-15°119			24	+1°189	-46°161	65 2335	8°9	10	+17°794	-21°495			12	+35°847	-48°402		
9	-16°480	-54°132			24	+1°383	-50°545	65 2336	9°0	11	+17°910	-49°252			48	+35°870	-7°544	64 2465	6°7
11	-16°332	-43°596			10	+1°994	-44°669			10	+18°335	-4°530			11	+35°922	-31°614		
12	-16°178	-33°855	65 2319	9°7	10	+2°023	-64°617			10	+18°344	-21°583			10	+36°000	-13°123		
24	-16°080	-56°693	65 2318	9°0	11	+3°012	-59°496			10	+18°422	-5°482			10	+36°316	-14°639	65 2370	9°8
9	-15°553	-27°027			10	+3°081	-27°984			10	+19°094	-27°790			12	+36°360	-14°767		
10	-15°471	-44°836			17	+3°420	-36°849	65 2337	9°2	9	+19°206	-61°891			39	+36°446	-34°652	65 2371	7°1
10	-15°098	-1°858			10	+3°463	-2°873			9	+19°454	-13°778			12	+36°729	-64°898	65 2373	9°9

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.				
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.	
	831,					891,				PLATE CENTRE.							
9	+37.449	-13.049	65	2372	9.7	12	+59.443	-39.275	65	2395	9.8	17	-44.375	+33.110	64	2500	9.3
11	+37.537	-12.968	65	2372	9.7	13	+60.794	-47.125	65	2397	9.2	10	-44.249	+38.151			
9	+37.572	-18.015				12	+61.387	-35.150	65	2398	9.8	12	-44.150	+17.493			
16	+37.844	-4.582	64	2467	9.2	26	+61.466	-44.891	65	2399	8.5	13	-43.863	+5.376	64	2498	9.9
10	+37.898	-6.319				10	+61.816	-11.878	65	2396	9.9	10	-43.668	+29.543			
10	+38.020	-64.394				11	+61.960	-11.854				10	-43.126	+23.448			
10	+38.261	-10.441										16	-43.089	+8.382	64	2502	9.5
12	+39.130	-23.705	65	2374	9.9							10	-42.755	+31.612			
10	+39.158	-56.825										19	-42.687	+37.861	64	2503	9.3
15	+39.399	-28.241	65	2376	9.5							14	-42.489	+63.445	63	2885	9.3
	841												61				
9	+39.612	-8.500	65	2375	8.9							10	-42.341	+43.040			
20	+39.750	-8.475												14	-41.361	+26.166	64	2504	9.6
11	+40.165	-7.053										16	-40.763	+56.326	63	2890	9.2
14	+40.248	-34.028	65	2377	9.5							9	-40.468	+19.219			
10	+40.675	-62.543										9	-40.279	+41.562			
9	+40.810	-15.664										12	-40.172	+32.985			
11	+41.044	-0.819										12	-40.081	+57.368	63	2892	9.6
11	+41.776	-36.829										16	-39.612	+36.972	64	2507	9.4
9	+41.790	-1.523										11	-39.416	+22.754	64	2506	9.6
10	+41.980	-51.422										10	-39.269	+58.377	63	2894	9.9
	851												71				
10	+42.177	-18.505										60	-38.714	+56.170	63	2896	6.8
11	+42.233	-32.320										11	-38.639	+27.250			
13	+42.769	-63.448	65	2379	9.7							13	-37.877	+49.734	64	2508	9.3
10	+42.817	-53.580										20	-37.553	+61.590	63	2898	8.9
10	+43.098	-48.250										13	-37.532	+10.145			
9	+43.238	-44.656										10	-37.400	+36.037			
13	+43.613	-20.652	65	2378	9.6							10	-37.370	+50.130			
9	+44.307	-51.928										9	-36.779	+20.852			
14	+44.554	-36.228	65	2380	9.5							10	-36.285	+60.295			
14	+45.028	-32.900	65	2381	9.3							10	-36.284	+44.308			
	861												81				
15	+45.162	-59.834	65	2382	9.5							11	-36.135	+10.151			
16	+46.286	-28.530	65	2384	9.1							12	-35.922	+7.854			
12	+46.468	-18.296	65	2383	9.7							10	-35.514	+7.382			
11	+46.554	-2.782										20	-35.421	+36.454	64	2509	8.9
11	+46.824	-39.863	65	2385	9.9							10	-35.041	+31.819			
12	+46.985	-55.542	65	2386	9.6							13	-33.808	+2.383			
9	+47.478	-11.885										16	-33.776	+36.849	64	2510	9.3
10	+47.489	-29.469										9	-33.652	+31.512			
10	+47.537	-55.365										10	-33.580	+31.930			
10	+47.611	-55.131										20	-33.411	+7.442			
	871												91				
10	+48.931	-18.799										12	-33.224	+6.749			
10	+49.444	-30.886										12	-32.810	+33.716			
10	+49.877	-55.260										16	-32.631	+53.408	63	2902	9.5
10	+50.329	-43.882	65	2387	9.9							9	-32.452	+42.239			
11	+50.422	-43.636												10	-32.282	+32.369	
11	+50.554	-42.145										22	-31.968	+14.077	64	2511	8.9
12	+50.875	-1.670	64	2479	9.9							10	-31.865	+38.571			
9	+51.153	-38.693										15	-31.520	+38.169	64	2512	9.9
11	+51.226	-10.559										12	-31.494	+24.574			
9	+52.415	-56.734										11	-30.826	+5.995			
	881												101				
11	+52.478	-1.700										16	-30.364	+10.401	64	2514	9.3
11	+53.414	-43.432										16	-29.663	+14.104	64	2515	9.5
12	+55.076	-57.529	65	2389	9.9							11	-28.546	+63.602	63	2910	9.9
14	+55.620	-64.178	65	2390	9.3							10	-28.372	+32.009			
9	+57.409	-44.409										9	-27.709	+33.248			
10	+57.486	-7.008										9	-27.379	+23.109			
11	+57.770	-17.937	65	2391	9.9							11	-27.339	+42.533			
12	+57.870	-31.225	65	2393	9.9							15	-27.273	+3.752	64	2516	9.6
13	+57.988	-17.329	65	2392	9.3							13	-27.187	+33.181			
10	+58.063	-56.006	65	2394	9.9							10	-27.026	+40.372			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
12	-26.929	+45.895			10	-7.769	+51.324			17	+6.925	+61.915	63 2960	9.2	10	+28.545	+32.792		
10	-25.958	+44.345			11	-7.685	+46.616			11	+6.925	+33.734			11	+28.670	+38.821		
9	-25.841	+49.221			15	-7.339	+18.293	64 2538	9.8	15	+7.505	+34.226	64 2557	9.8	9	+28.703	+58.399	63 2997	10.0
11	-25.585	+19.681	64 2517	9.9	10	-7.332	+52.338			10	+7.876	+31.033			10	+28.876	+17.916		
12	-24.639	+31.753			18	-6.831	+41.873	64 2539	9.2	15	+8.841	+36.642	64 2558	9.5	15	+29.819	+33.442	64 2580	9.5
12	-24.584	+43.508			10	-6.622	+46.029			12	+8.916	+34.896			13	+30.706	+37.676	64 2582	9.8
9	-24.346	+6.473			11	-6.499	+43.019			10	+8.999	+13.941			12	+30.801	+45.932	64 2581	9.6
12	-24.301	+14.890			15	-6.486	+5.655	64 2540	9.8	10	+9.023	+36.342			13	+30.970	+10.074	64 2584	9.8
12	-23.675	+39.184			14	-6.269	+37.172			11	+9.881	+4.584			16	+31.062	+35.494	64 2583	9.4
9	-23.373	+2.715			10	-5.978	+41.481			14	+10.417	+50.659	64 2559	9.8	10	+31.132	+34.210		
	121					181					241					301			
18	-23.066	+15.199	64 2518	9.3	11	-5.908	+27.426			10	+10.887	+48.378			16	+31.380	+7.868	64 2585	9.4
9	-22.796	+55.341			13	-5.876	+9.309	64 2541	9.9	11	+10.900	+2.922			14	+32.444	+20.332	64 2586	9.6
15	-22.337	+34.774	64 2520	9.6	12	-5.669	+21.196			11	+11.019	+57.176			10	+32.558	+17.309		
13	-22.032	+29.963	64 2521	9.9	11	-5.516	+48.214			11	+11.389	+56.434			11	+32.809	+19.477		
12	-21.831	+27.394	64 2522	9.9	9	-5.094	+58.212			14	+11.581	+39.841			16	+33.254	+2.442	64 2588	9.4
9	-21.772	+2.019			10	-4.728	+6.532			10	+11.618	+63.795	63 2967	9.8	12	+33.510	+40.297	64 2587	10.0
11	-21.576	+35.529			13	-4.188	+42.120			13	+11.965	+21.946			20	+33.857	+58.619	63 3003	8.6
14	-20.894	+58.384	63 2920	9.5	9	-4.084	+24.586			14	+11.967	+17.693	64 2560	9.9	10	+34.066	+28.837		
10	-20.489	+17.896			9	-3.747	+43.488			9	+12.300	+49.869			9	+34.178	+59.022		
9	-19.784	+16.172			12	-3.554	+18.065			10	+12.872	+1.540	64 2561	10.0	17	+34.734	+36.858	64 2589	9.3
	131					191					251					311			
11	-18.697	+32.310			9	-3.058	+21.336			15	+13.094	+3.047	64 2562	9.6	10	+34.835	+20.272		
9	-18.589	+22.783			14	-2.360	+8.406	64 2542	9.9	11	+13.744	+63.050	63 2970	9.9	10	+35.583	+40.140		
9	-18.454	+5.761			15	-2.109	+52.672	64 2543	9.6	10	+13.887	+56.858			10	+35.795	+48.514		
10	-18.374	+60.123			12	-2.051	+12.288			28	+14.023	+25.133	64 2564	8.6	9	+36.059	+47.732		
13	-18.346	+28.524	64 2523	9.9	11	-1.885	+4.340			22	+14.091	+49.093	64 2563	8.8	12	+36.483	+0.836		
15	-17.756	+1.755	64 2524	9.2	20	-1.300	+40.276	64 2544	9.0	15	+14.391	+43.625	64 2565	9.7	14	+36.587	+38.187	64 2590	9.5
12	-17.374	+3.783			10	-1.162	+44.178			14	+14.669	+58.230	63 2972	9.5	22	+36.636	+32.094	64 2591	8.8
16	-17.106	+29.902	64 2525	9.5	11	-0.794	+9.862			14	+15.267	+45.137	64 2566	9.8	14	+37.260	+1.135	64 2593	9.6
10	-16.855	+45.754			10	-0.110	+50.625			11	+15.647	+40.458	64 2567	10.0	10	+37.289	+39.923		
15	-16.780	+10.461	64 2526	9.8	15	+0.412	+47.659			9	+16.211	+44.266			16	+37.300	+17.067	64 2592	9.4
	141					201					261					321			
11	-16.726	+28.480			10	+0.506	+47.825	64 2546	9.6	10	+16.720	+62.217	63 2975	9.8	17	+37.396	+5.238	64 2594	9.2
14	-16.696	+17.031	64 2527	9.7	16	+1.041	+33.087	64 2547	9.7	10	+17.140	+26.290			10	+37.491	+6.266		
11	-16.641	+64.630			11	+1.102	+62.239			9	+17.404	+24.340			11	+37.631	+21.756		
14	-16.591	+45.259	64 2528	9.6	10	+1.439	+37.795			9	+17.426	+50.593			12	+37.935	+8.138	64 2595	9.9
11	-15.754	+63.463			10	+1.569	+59.017			14	+17.824	+35.225	64 2568	9.6	12	+38.035	+5.550	64 2596	9.6
10	-15.742	+26.204			14	+1.628	+19.468	64 2548	9.9	14	+18.326	+41.522	64 2569	9.8	9	+38.086	+52.306		
12	-15.439	+54.898	63 2925	9.5	12	+1.719	+21.410	64 2549	9.9	10	+18.585	+10.424			10	+38.107	+53.967		
12	-15.175	+27.488			9	+1.749	+45.723			9	+19.060	+34.104			16	+38.154	+54.219	63 3009	9.1
16	-14.526	+26.200	64 2530	9.5	11	+1.840	+23.048			12	+19.814	+4.152			11	+38.515	+15.676	64 2597	10.0
14	-13.222	+32.001	64 2531	9.9	10	+2.184	+32.776			14	+20.719	+26.879	64 2571	9.7	14	+39.020	+17.919	64 2599	9.9
	151					211					271					331			
15	-12.856	+31.674	64 2532	9.9	12	+2.275	+58.942	63 2953	9.8	16	+20.799	+20.169	64 2572	9.4	10	+39.040	+32.828		
11	-12.763	+60.060			18	+2.487	+50.190	64 2552	9.0	9	+21.011	+33.546			16	+40.092	+2.639	64 2600	9.3
12	-12.452	+35.632			11	+2.648	+17.998			11	+21.185	+30.885			11	+40.696	+28.811		
11	-12.238	+2.841			10	+3.141	+50.711			11	+21.369	+41.005			10	+40.909	+43.538		
15	-12.123	+10.421	64 2533	9.6	11	+3.166	+36.262			11	+21.421	+35.834			11	+41.745	+43.448		
13	-12.120	+30.532			9	+3.286	+54.434			12	+21.695	+39.848			11	+42.093	+19.202		
20	-11.796	+28.729	64 2534	9.0	10	+3.489	+41.122			15	+22.364	+15.932	64 2574	9.6	12	+42.425	+24.837	64 2601	10.0
13	-11.787	+38.008			13	+3.858	+36.744			10	+22.561	+35.268			12	+42.742	+27.644	64 2602	10.0
10	-11.554	+48.287			16	+4.211	+48.133	64 2553	9.4	10	+22.683	+24.739			10	+42.770	+1.904		
15	-11.241	+57.073	63 2929	9.5	11	+4.431	+29.194			10	+23.371	+62.873	63 2989	9.8	18	+43.281	+40.269	64 2603	9.1
	161					221					281					341			
16	-11.217	+38.141	64 2536	9.7	10	+4.450	+8.002			13	+23.688	+19.479			10	+43.293	+16.239		
24	-11.107	+6.615	64 2535	8.6	16	+4.886	+23.026	64 2554	9.5	10	+24.027	+47.775			11	+43.688	+2.657		
10	-10.751	+43.541			11	+4.949	+33.877	64 2555	9.9	11	+24.094	+16.123			13	+44.040	+52.352	64 2604	9.5
9	-10.577	+39.832			10	+5.088	+33.893			9	+24.983	+42.714	64 2576	10.0	9	+44.096	+61.354	63 3022	10.0
12	-10.116	+20.749			10	+5.451	+47.941			12	+26.520	+31.394	64 2577	10.0	13	+44.457	+23.883	64 2605	10.0
17	-10.020	+37.648	64 2537	9.6	12	+5.614	+48.987			10	+26.868	+19.811			9	+45.325	+49.012		
12	-9.579	+31.681			10	+5.648	+32.703			12	+26.907	+44.369	64 2578	10.0	10	+45.380	+2.533		
12	-8.978	+7.475			10	+6.667	+47.013			13	+27.854	+59.428			14	+45.910	+22.272	64 2607	9.8
12	-8.798	+48.010			15	+6.715	+42.181	64 2556	9.8	9	+28.164	+5.179			13	+46.036	+41.092	64 2606	9.8
11	-8.180	+55.999			11	+6.814	+25.544			16	+28.236	+57.072	63 2994	9.4	11	+46.360	+25.283		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
I4	+47°536	+21°869	64 2608	9·6	IO	-57°535	- 6°960			I2	-32°029	-38°421			I5	-11°241	-17°406	65 2445	9·7
I8	+47°556	+ 1°707	64 2610	9·2	II	-56°482	-17°837	65 2391	9·9	I6	-31°826	-55°242	65 2421	9·7	IO	-11°021	-24°331		
I7	+47°716	+16°471	64 2609	9·2	I7	-56°367	-57°529	65 2389	9·9	9	-31°641	-15°812			I2	-10°157	-45°255		
IO	+48°329	+61°486	63 3028	9·6	I6	-56°301	-17°219	65 2392	9·3	20	-31°486	-49°846	65 2422	8·7	IO	-10°056	-54°351		
I3	+49°529	+38°238			I2	-55°423	-31°102	65 2393	9·9	IO	-31°251	-36°540			I6	- 9°813	-14°647	65 2446	9·3
			64 2611	9·4															
II	+49°632	+38°344			22	-55°345	-64°136	65 2390	9·3	9	-30°868	-18°959			II	- 9°731	-26°001		
II	+50°271	+58°485	63 3032	9·4	IO	-53°507	-55°803	65 2394	9·9	II	-30°695	-36°549			I6	- 8°535	- 8°211	65 2447	9·4
I4	+50°452	+ 5°012	64 2613	9·7	I5	-53°315	-39°010	65 2395	9·8	I2	-30°649	-39°989			I3	- 8°005	- 8°593	65 2449	9·9
I5	+51°231	+10°332	64 2615	9·9	II	-52°878	-11°513			I3	-30°348	- 5°395	64 2513	9·7	I4	- 7°442	-56°455		
I4	+51°248	+32°589	64 2614	9·4	I2	-52°739	-11°480	65 2396	9·9	I2	-30°219	-36°508			IO	- 7°149	- 9°195		
	361					421					481					541			
II	+51°466	+ 3°325			II	-52°356	-41°263			9	-30°199	-35°073			I4	- 7°052	-50°107	65 2450	9·7
II	+51°548	+ 2°081			I5	-51°654	-34°781	65 2398	9·8	I5	-30°133	-36°221	65 2423	9·7	9	- 7°016	-56°577		
9	+52°546	+22°605			I9	-51°405	-46°756	65 2397	9·2	I6	-29°558	-44°359	65 2425	9·5	IO	- 6°811	- 5°389		
II	+53°168	+59°859	63 3036	9·2	32	-50°889	-44°476	65 2399	8·5	I6	-29°491	-53°504	65 2424	9·3	I2	- 6°168	- 4°085		
9	+53°377	+39°026			II	-48°646	-47°664			I6	-29°198	-27°640	65 2426	9·3	I3	- 4°497	-15°443		
I3	+53°413	+17°999	64 2619	9·7	I4	-47°852	-46°585			9	-28°897	- 8°649			II	- 3°685	-27°210		
IO	+53°589	+17°895			I4	-47°218	-28°042	65 2402	9·7	I2	-28°664	-44°977			IO	- 3°479	-34°005		
20	+53°701	+25°135	64 2620	9·0	22	-46°771	-49°175	65 2401	9·2	9	-27°377	-26°903			IO	- 3°225	-40°357		
IO	+53°843	+32°508	64 2617	10·0	I3	-46°273	-15°630	65 2403	9·7	I3	-26°983	-34°681	65 2427	9·7	I2	- 2°776	-21°856		
I4	+53°995	+47°626	64 2616	9·2	IO	-45°705	-13°874			I2	-26°712	-41°042			I3	- 1°600	-25°343	65 2451	9·8
	371					431					491					551			
I4	+54°150	+ 7°336	64 2621	9·8	I4	-45°244	-17°598	65 2405	9·4	I3	-25°951	-30°642	65 2428	9·7	IO	- 1°469	-27°730		
20	+54°866	+23°377	64 2622	9·1	II	-45°033	-29°538			I2	-25°706	-21°513			I6	- 0°752	-26°340	65 2452	9·7
IO	+55°504	+ 3°040			I6	-44°493	-15°956	65 2406	9·3	9	-25°232	-10°703			9	- 0°411	-27°425		
II	+55°549	+ 1°278			I3	-44°355	-61°764	65 2404	9·8	II	-23°987	-21°601	65 2429	9·9	I3	- 0°290	- 3°767	64 2454	9·8
II	+55°905	+44°903	64 2623	9·6	IO	-43°973	-27°172			II	-23°889	-14°447			I6	+ 0°357	-15°292	65 2453	9·6
I3	+56°203	+26°655	64 2625	9·8	I4	-43°265	- 1°866	64 2501	9·7	IO	-23°499	-31°613	65 2431	9·5	IO	+ 0°857	-20°938		
I6	+56°359	+ 6°265	64 2626	9·2	I4	-42°155	-25°525	65 2408	9·9	I5	-23°259	-31°890			IO	+ 1°268	- 9°676		
II	+56°381	+33°854			II	-41°069	-47°769			IO	-22°969	-19°043			20	+ 1°341	-20°885	65 2454	9·2
9	+56°522	+34°078	64 2624	9·7	I6	-40°172	- 1°150	64 2505	9·3	9	-22°953	-55°670			II	+ 1°559	-21°732		
IO	+56°752	+45°356			22	-39°169	-27°707	65 2410	9·2	I3	-22°916	-53°572	65 2430	9·9	9	+ 1°883	-12°261		
	381					441					501					561			
IO	+56°828	+ 6°649	64 2627	10·0	I6	-39°131	- 9°358	65 2412	9·5	I2	-22°863	-32°546			I5	+ 1°897	-58°381		
I2	+57°191	+ 6°173	64 2628	10·0	9	-39°127	-43°976			I4	-22°791	-55°700	65 2432	9·8	I9	+ 2°063	- 3°872	64 2550	9·1
IO	+58°840	+41°818	64 2629	9·8	I3	-38°415	-11°457	65 2415	9·8	I9	-22°613	- 5°001	64 2519	8·9	I3	+ 2°555	- 3°334	64 2551	9·8
IO	+58°914	+59°329	63 3044	9·4	I4	-38°245	-42°762	65 2411	9·5	I6	-22°596	-47°390	65 2433	9·3	I3	+ 3°118	-48°795	65 2455	9·7
9	+59°507	+ 4°534			I2	-37°863	-18°249			IO	-22°594	-28°767			9	+ 3°687	-32°561		
I2	+59°957	+ 4°824	64 2632	10·0	IO	-37°856	-27°520			I2	-22°065	-31°853			9	+ 3°747	-24°126		
II	+60°070	+ 0°966			II	-37°791	-11°267			I5	-22°012	-10°335	65 2434	9·5	II	+ 4°980	-25°238		
I2	+60°118	+27°933	64 2630	9·8	IO	-37°788	-22°279			9	-21°624	- 5°793			9	+ 5°380	- 1°840		
IO	+60°335	+26°204			I2	-37°514	-50°941			I2	-21°059	-44°122			II	+ 5°600	-31°151		
I3	+60°411	+ 9°741	64 2633	9·8	I7	-37°427	-60°058	65 2413	9·7	I2	-20°937	-25°849	65 2436	9·9	9	+ 6°629	-37°820		
	391					451					511					571			
20	+60°528	+34°118	64 2631	8·8	I2	-37°421	- 2°993			IO	-19°788	-34°522			I4	+ 8°483	-44°761	65 2457	9·6
IO	+61°410	+19°555			I6	-37°086	-59°275	65 2414	9·7	20	-18°798	-38°068	65 2437	9·0	II	+ 8°748	-18°391		
II	+61°438	+ 4°476			I2	-36°516	-35°077			II	-18°294	-60°000			I4	+ 8°816	-17°145	65 2458	9·8
9	+61°766	+19°568			II	-35°806	-31°244			22	-18°216	-62°520	65 2438	9·0	IO	+ 9°294	-33°291		
I3	+62°331	+44°728	64 2634	9·6	I2	-35°709	- 9°785			I3	-18°091	-21°452			IO	+ 9°323	-29°375		
9	+63°474	+ 1°392			I2	-35°313	-21°381			IO	-17°844	- 4°032			I3	+10°468	-15°496		
II	+63°872	+29°601	64 2636	10·0	I4	-35°065	-40°010	65 2416	9·5	I4	-17°679	-55°313			26	+10°874	-20°551	65 2459	8·4
9	+63°902	+41°532	64 2635	10·0	II	-34°741	-31°274			II	-17°351	-16°103			I2	+11°086	-60°500	65 2460	10·0
9	+64°286	+ 3°688			I3	-34°574	-51°124			I2	-17°049	-24°166	65 2440	9·9	9	+12°998	-15°540		
9	+64°298	+62°492	63 3050	9·9	I2	-34°418	-26°867			I5	-16°938	-38°888	65 2441	9·5	9	+13°140	-17°416		
	401					461					521					581			
I8	-64°592	-56°118	65 2386	9·6	II	-34°413	-30°454			II	-16°843	- 4°918			I6	+13°705	-25°453	65 2461	9·4
I4	-64°510	- 2°109	64 2479	9·9	I6	-34°404	-31°614	65 2418	9·5	I6	-16°839	-18°166	65 2443	9·4	I4	+15°165	-47°807	65 2462	9·6
9	-64°054	-55°919			I5	-33°990	-56°247	65 2417	9·9	I4	-16°715	-43°513	65 2442	9·7	IO	+15°204	- 7°762		
I2	-63°524	-10°948			II	-33°807	-49°368			I2	-16°685	-15°118			II	+15°307	-37°623		
I3	-62°909	- 2°026			I2	-33°554	-25°748			I8	-16°664	-59°867	65 2439	9·0	II	+15°692	-48°048	65 2463	9·9
9	-62°056	-44°246			II	-33°518	-29°247			IO	-15°768	- 6°215			I2	+16°602	-54°301		
I3	-61°985	-44°000	65 2387	9·9	9	-33°474	-25°071			I2	-14°432	-44°096			I5	+17°821	-32°223	65 2464	9·5
9	-61°708	-55°638			24	-33°162	-62°655	65 2419	8·9	I2	-14°258	- 0°862	64 2529	9·9	I2	+17°972	- 6°471	64 2570	10·0
9	-61°612	-39°026			II	-32°847	-24°846			II	-12°043	-28°744			IO	+18°078	- 9°084	65 2465	9·9
9	-59°033	-43°577			I3	-32°446	-57°778			I5	-11°509	-14°517	65 2444	9·6	9	+18°561	-35°842		

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Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
I	111,				22	171,				I3	231,				I3	291,			
9	- 7°273	+17°089	64 2691	10°0	10	+20°065	+61°104	63 3134	8°8	10	+44°454	+ 2°585	64 2760	9°4	II	-52°617	-52°158	65 2531	9°5
II	- 7°237	+26°095			13	+20°306	+ 9°334			10	+45°356	+ 7°626			II	-51°016	-23°745	65 2533	9°8
12	- 5°678	+46°293			9	+20°559	+25°884	64 2733	9°7	13	+45°625	+42°419	64 2761	9°5	9	-50°292	-22°887		
9	- 5°006	+ 4°346	64 2692	9°8	9	+20°625	+46°891			10	+45°646	+ 8°184			19	-50°287	- 3°877	64 2638	9°1
9	- 5°200	+41°493			9	+20°891	+ 6°165			16	+46°364	+ 5°704	64 2763	9°1	18	-49°877	- 3°781	64 2640	9°0
9	- 3°595	+32°085			18	+21°802	+37°228	64 2734	8°8	10	+47°850	+52°690	64 2764	10°0	19	-49°220	-62°573	65 2534	9°0
9	- 3°444	+28°586			10	+22°104	+10°872			10	+48°770	+54°467	63 3156	9°9	9	-47°942	-49°003		
14	- 3°204	+ 4°846	64 2694	9°3	26	+23°605	+56°725	63 3136	8°0	12	+48°833	+28°183	64 2765	9°9	13	-47°466	-24°135	65 2536	9°2
22	- 2°462	+43°925	64 2695	8°6	11	+23°662	+37°952	64 2735	10°0	14	+49°002	+27°826	64 2766	9°4	12	-47°427	-24°186		
17	- 1°306	+49°143	64 2698	9°1	10	+24°408	+ 5°640			10	+49°598	+22°610			II	-47°378	-64°311	65 2535	9°5
32	- 1°223	+ 3°984	64 2697	8°0	9	+24°687	+35°362			10	+49°859	+39°855			II	-46°835	-13°420	65 2537	10°0
10	- 0°797	+51°892	64 2699	10°0	9	+25°219	+54°919			13	+51°134	+ 4°873	64 2768	9°8	10	-46°581	-12°490		
10	- 0°485	+31°612			12	+25°420	+42°215	64 2736	9°8	11	+51°435	+12°114			14	-45°092	-48°370	65 2538	9°2
9	+ 1°008	+42°146			10	+25°422	+24°074			12	+51°515	+51°411			9	-44°611	-58°529	65 2539	10°0
9	+ 1°263	+42°522			15	+26°184	+18°670	64 2737	9°4	28	+51°519	+47°085	64 2767	8°1	11	-43°777	-10°068	65 2541	10°0
9	+ 1°621	+37°134			16	+26°453	+10°487	64 2739	9°1	12	+51°987	+25°543	64 2769	9°9	11	-43°658	-41°473	65 2540	10°0
11	+ 3°640	+ 7°462	64 2701	9°7	10	+27°091	+14°795			10	+52°429	+53°330	63 3163	9°7	18	-43°270	-20°225	65 2543	9°1
10	+ 4°091	+ 3°326	64 2702	10°0	11	+27°588	+16°610			11	+53°597	+37°110	64 2771	10°0	12	-42°338	-55°850	65 2542	9°4
15	+ 5°445	+24°163	64 2704	9°2	9	+28°229	+37°334			9	+53°908	+52°628	64 2770	10°0	9	-42°311	-52°029		
14	+ 5°781	+36°658	64 2705	9°4	12	+28°666	+37°842	64 2741	9°9	15	+54°131	+18°819	64 2772	9°3	12	-41°762	-39°162	65 2544	10°0
11	+ 6°491	+21°554	64 2706	9°9	12	+29°111	+59°998	63 3145	9°6	9	+54°308	+28°088			14	-41°735	-23°952	65 2545	9°5
11	+ 6°727	+23°077	64 2707	9°8	10	+29°423	+42°677			16	+55°046	+ 5°359	64 2773	9°2	12	-40°966	- 1°990	64 2647	9°9
11	+ 6°749	+56°914	63 3115	9°9	11	+29°517	+18°512			11	+55°493	+ 7°042			11	-40°283	-14°532	65 2546	9°9
9	+ 6°794	+35°980			9	+29°578	+30°837			10	+55°760	+44°312			12	-39°234	-52°938	65 2547	9°6
12	+ 7°455	+23°568	64 2708	9°5	9	+30°320	+23°093			11	+55°817	+ 3°713			13	-39°159	-15°139	65 2549	9°4
11	+ 7°503	+42°205			10	+30°546	+ 5°788			13	+56°099	+10°521	64 2774	9°8	12	-39°101	-29°732	65 2548	9°9
18	+ 8°386	+ 0°342	64 2709	9°0	13	+30°624	+28°781	64 2742	9°4	11	+57°185	+53°659	63 3165	10°0	12	-39°018	-15°451	65 2550	9°8
10	+ 8°843	+45°805			11	+31°046	+29°719			11	+57°599	+11°153	64 2775	10°0	22	-39°011	- 9°715	65°2551	8°1
11	+ 9°313	+10°763	64 2710	10°0	10	+31°404	+18°939	64 2743	10°0	10	+57°980	+16°928			22	-38°972	- 9°747		
9	+ 9°359	+17°485			19	+32°112	+42°113	64 2744	9°0	11	+58°153	+12°401	64 2776	9°9	10	-38°873	- 3°259		
12	+ 9°444	+ 7°252	64 2711	9°8	10	+32°242	+23°708			12	+58°701	+11°613	64 2777	10°0	10	-38°568	-18°455		
10	+ 9°593	+29°122			15	+32°339	+31°476	64 2745	9°2	9	+59°721	+18°751			11	-38°021	- 2°577		
10	+ 9°877	+62°271			10	+32°994	+39°342			9	+62°155	+50°395	64 2778	10°0	10	-37°897	-44°810		
10	+10°053	+53°219			10	+33°158	+47°430			13	+62°370	+25°989	64 2779	9°8	11	-37°758	-56°648	65 2552	9°6
12	+10°069	+32°033	64 2712	9°8	11	+33°529	+16°139			11	+62°882	+18°823	64 2780	10°0	36	-37°683	-19°335	65 2553	8°0
13	+10°251	+16°903	64 2713	9°6	9	+34°122	+50°500			9	+63°281	+62°956	63 3175	9°9	17	-37°651	-19°227		
9	+10°611	+ 0°986	64 2715	10°0	13	+34°240	+ 7°764	64 2747	9°6	13	+63°762	+12°928	64 2782	9°5	9	-37°095	-56°062		
12	+10°637	+44°519	64 2714	9°7	12	+34°532	+ 4°308	64 2749	9°8	11	+63°965	+26°268	64 2781	10°0	10	-36°086	-38°877		
13	+10°870	+47°562	64 2716	9°6	14	+34°872	+15°507	64 2750	9°5	9	+64°291	+62°456	63 3177	10°0	21	-35°597	-50°471	65 2554	8°7
11	+10°997	+26°016	64 2717	9°8	12	+35°173	+45°580	64 2748	10°0	12	-64°070	-23°720	65 2517	9°8	10	-35°311	-24°429		
12	+11°090	+10°900	64 2718	9°5	16	+36°235	+53°066	64 2751	8°8	15	-63°577	-43°523	65 2516	9°2	12	-35°140	-48°808	65 2555	9°6
10	+11°918	+17°169	64 2719	9°8	13	+36°328	+43°992	64 2753	9°4	11	-62°905	-43°728	65 2518	9°4	15	-34°396	-36°881	65 2556	9°4
11	+12°383	+37°659	64 2720	9°9	10	+37°108	+17°081			20	-62°721	-11°888	65 2519	8°8	11	-33°630	-24°802	65 2557	9°8
12	+12°491	+30°776	64 2721	9°8	13	+37°202	+18°883	64 2755	9°4	16	-62°302	- 5°341	64 2618	9°0	10	-33°608	-24°850		
16	+12°825	+ 9°431	64 2722	9°0	9	+37°549	+48°506			11	-61°000	-28°919	65 2520	9°9	10	-33°546	- 9°429		
12	+13°821	+57°846	63 3124	9°6	11	+38°500	+23°876			10	-60°752	-20°528			12	-33°510	-20°771	65 2558	9°8
16	+13°855	+37°083	64 2724	9°2	10	+38°897	+38°269			12	-60°176	-32°035	65 2521	9°4	12	-33°134	-23°435	65 2561	9°8
10	+14°121	+10°212	64 2725	9°8	19	+39°825	+27°267			9	-59°628	-38°368			20	-33°061	-17°529	65 2562	8°6
9	+14°466	+35°619			12	+40°140	+50°304	64 2756	10°0	11	-56°931	-41°537	65 2522	9°1	11	-32°882	-45°006	65 2559	10°0
16	+14°779	+39°437	64 2727	9°0	10	+40°154	+11°963			15	-56°829	-41°							

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
12	-28.291	-56.040	65 2568	9.4	14	-3.021	-29.048	65 2594	9.4	11	+29.837	-21.769			18	+50.283	-42.886	65 2643	9.0
9	-28.091	-3.744			12	-2.922	-54.375	65 2593	9.9	9	+29.844	-54.977			12	+51.455	-63.059	65 2644	9.5
11	-27.871	-43.831			11	-2.833	-47.915			18	+29.901	-21.177	65 2619	8.8	11	+51.478	-10.974		
9	-27.338	-58.697			13	-2.206	-2.213	64 2696	9.3	11	+31.805	-56.503			9	+52.032	-9.647		
10	-26.744	-43.188			11	-2.013	-54.193			10	+32.322	-17.673			10	+52.105	-14.541		
9	-26.680	-4.504			10	-1.247	-52.944			10	+32.611	-4.451			9	+52.491	-37.747		
11	-26.403	-9.251			14	-0.790	-45.163	65 2595	9.5	12	+32.840	-6.084	64 2746	9.6	11	+52.644	-2.342		
9	-24.988	-43.721			13	+1.065	-3.449	64 2700	9.6	12	+34.213	-16.979	65 2621	10.0	9	+52.798	-44.324		
11	-24.057	-19.403	65 2570	9.7	12	+3.979	-51.587	65 2596	10.0	12	+34.261	-40.325	65 2622	10.0	13	+53.602	-44.248	65 2646	9.4
13	-24.057	-34.526	65 2569	9.5	21	+4.275	-6.812	64 2703	8.8	9	+34.424	-27.865			12	+53.608	-12.111	65 2645	10.0
	361					421					481					541			
11	-23.547	-51.236	65 2571	10.0	13	+4.276	-50.001	65 2597	10.0	12	+34.559	-56.545			10	+53.782	-16.672		
12	-23.529	-19.001	65 2572	9.7	11	+4.338	-44.563			12	+34.783	-49.886	65 2623	9.4	10	+53.872	-38.495		
10	-23.003	-63.888			10	+5.097	-41.899			14	+34.907	-49.672			10	+54.269	-28.252		
48	-22.801	-47.672	65 2573	6.7	10	+6.004	-15.341			13	+35.263	-2.598	64 2752	10.0	11	+55.402	-38.001		
11	-22.596	-50.004	65 2574	10.0	15	+6.926	-46.487	65 2598	9.4	9	+35.664	-40.943			9	+55.893	-60.618		
10	-22.530	-20.723			11	+7.100	-56.287			11	+35.889	-29.363			14	+55.909	-47.880	65 2648	9.3
14	-21.105	-55.495	65 2575	9.3	12	+7.712	-63.253	65 2599	9.9	9	+36.309	-25.631			10	+57.544	-33.711		
10	-21.095	-0.196			18	+9.874	-14.863	65 2600	9.0	15	+36.364	-4.957	64 2754	9.2	14	+58.310	-46.447	65 2649	9.3
11	-21.025	-39.750			11	+10.286	-23.135	65 2601	10.0	13	+36.708	-40.878	65 2624	10.0	11	+59.145	-4.396		
11	-20.811	-12.530	65 2576	10.0	13	+10.438	-59.418	65 2602	9.4	16	+38.487	-41.231	65 2625	9.8	9	+59.788	-63.905		
	371					431					491					551			
10	-19.442	-11.385			9	+10.969	-10.923			10	+38.707	-39.093			9	+59.937	-45.638		
11	-19.158	-29.415	65 2577	10.0	9	+11.600	-35.801			10	+38.752	-55.861			9	+60.040	-49.411		
11	-19.086	-18.817			15	+11.606	-35.007	65 2603	9.3	11	+38.766	-33.287			54	+61.068	-42.791	65 2652	7.0
10	-18.801	-28.806			15	+13.065	-1.784	64 2723	9.2	11	+39.166	-60.510			14	+61.436	-9.965	65 2650	9.5
9	-18.506	-41.443			10	+13.875	-26.431			11	+39.509	-29.137			13	+62.150	-51.743	65 2656	9.6
16	-17.880	-47.710	65 2579	9.2	16	+14.353	-11.572	65 2604	9.2	12	+39.871	-25.581	65 2626	9.8	12	+62.678	-12.176	65 2653	10.0
9	-16.966	-48.152			10	+16.001	-22.093			28	+40.349	-57.269	65 2627	8.1	11	+62.756	-12.724	65 2654	10.0
14	-16.146	-42.353	65 2580	9.4	10	+16.157	-24.929			10	+41.018	-51.280			9	+62.784	-38.500		
14	-15.841	-41.885	65 2581	9.6	14	+16.217	-0.978	64 2731	9.4	11	+41.189	-25.151			15	+62.884	-43.863	65 2657	9.2
10	-15.761	-1.204	64 2678	10.0	9	+16.583	-50.925			11	+41.216	-2.095			44	+62.980	-15.355	65 2655	7.1
	381					441					501					561			
15	-15.604	-9.091	65 2583	9.2	9	+16.859	-37.097			16	+41.237	-58.370	65 2629	9.1	12	+64.086	-59.624	65 2658	9.4
12	-14.748	-1.316	64 2679	9.6	10	+17.026	-30.852			13	+41.244	-41.808	65 2628	9.9					
11	-14.426	-38.029			12	+17.289	-3.999	64 2732	9.8	11	+42.175	-53.001							
9	-14.290	-45.901			12	+17.449	-41.057	65 2605	10.0	9	+42.434	-42.422							
9	-14.164	-29.183			16	+17.734	-31.902	65 2606	9.2	12	+42.475	-14.129							
11	-14.126	-36.289	65 2584	9.9	16	+17.827	-49.129	65 2607	9.4	9	+42.896	-42.037							
10	-13.171	-60.771			9	+18.300	-0.824			9	+42.907	-18.777							
10	-13.144	-3.216			10	+18.317	-51.105			10	+42.948	-60.120							
12	-13.002	-38.054	65 2585	9.8	12	+18.561	-59.025	65 2609	10.0	11	+43.062	-40.726							
9	-12.925	-46.159			12	+18.688	-17.406	65 2608	9.9	12	+43.380	-0.222	64 2759	9.9					
	391					451					511								
10	-12.174	-56.887			34	+18.877	-41.023	65 2610	8.3	9	+43.809	-26.454							
11	-11.892	-34.636			10	+18.916	-15.861			12	+44.607	-9.800	65 2631	9.9					
14	-10.995	-14.463	65 2587	9.4	10	+19.087	-39.756			11	+45.028	-6.504	64 2762	9.9					
10	-10.518	-33.303			20	+19.606	-41.684	65 2611	9.1	13	+45.442	-21.080	65 2632	9.4					
9	-10.257	-62.073			9	+20.496	-31.892			12	+45.593	-19.333	65 2633	9.9					
18	-9.950	-48.150	65 2588	8.8	11	+21.098	-7.447			11	+45.698	-46.147							
9	-9.854	-52.261			16	+21.317	-48.638	65 2612	9.4	11	+45.706	-16.353							
9	-9.335	-25.889			14	+21.558	-50.058	65 2613	9.7	11	+45.735	-56.864							
10	-8.513	-17.296			11	+22.019	-64.091			13	+45.795	-55.639	65 2635	9.8					
10	-8.476	-19.430			9	+23.694	-61.563			9	+46.563	-60.894							
	401					461					521								
11	-7.709	-51.661			11	+24.088	-46.519			14	+46.655	-11.019	65 2634	9.8					
12	-7.572	-30.419	65 2589	9.5	12	+25.049	-22.249	65 2614	9.8	20	+46.725	-28.448	65 2636	9.2					
11	-6.803	-40.473			14	+26.152	-2.635	64 2738	9.4	13	+46.915	-57.050	65 2638	9.6					
10	-6.711	-46.885			12	+26.318	-30.536	65 2615	9.7	28	+47.261	-29.799	65 2637	8.2					
10	-6.692	-33.532			14	+26.622	-30.251	65 2616	9.4	9	+47.392	-43.301							
11	-4.696	-31.165			11	+26.686	-44.593			23	+48.100	-33.176	65 2639	8.4					
12	-4.091	-6.957	64 2693	9.6	15	+26.852	-3.927	64 2740	9.2	12	+49.170	-40.975	65 2640	9.9					
10	-3.750	-16.566	65 2590	9.2	10	+27.457	-16.122			18	+49.589	-60.371	65 2642	8.8					
16	-3.364	-55.011	65 2591	9.4	16	+28.433	-22.269	65 2617	9.2	18	+49.893	-23.523	65 2641	9.1					
9	-3.173	-34.569	65 2592	10.0	22	+29.204	-9.207	65 2618	8.6	11	+50.261	-55.563							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 14 ^h 15 ^m , - 65°. Plate 753. 1893, June 8. PROVISIONAL CONSTANTS. a = - .01137 d = + .00005 b = - .00004 e = - .01134 c = - .1749 f = - .0920 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					10	51,	-32.840	+ 0.950	10	111,	- 0.728	+64.273	10	171,	+27.824	+13.739			
9	-32.408	+48.968			11	- 0.389	+31.402			10	+27.914	+14.865							
10	-31.122	+20.928			12	- 0.177	+19.029	64 2822	10.0	15	+29.430	+35.028	64 2849	9.4					
11	-30.920	+36.560			10	+ 0.838	+61.171			11	+30.233	+38.994							
14	-30.753	+60.370	63 3197	9.0	16	+ 1.330	+19.267	64 2823	9.1	10	+31.167	+21.462							
11	-30.735	+ 5.358			9	+ 1.428	+17.947			12	+31.262	+ 2.436	64 2852	10.0					
10	-30.661	+14.249			19	+ 1.812	+39.354	64 2824	9.0	18	+31.453	+18.465	64 2851	8.8					
15	-28.993	+11.950			14	+ 2.224	+25.911	64 2825	9.9	11	+31.885	+59.728	63 3258	10.0					
15	-28.931	+11.944	64 2800	8.8	10	+ 2.285	+43.912			9	+32.047	+28.001							
16	-27.636	+35.620	64 2801	9.2	10	+ 2.492	+22.622			9	+33.284	+46.476							
11	61	-26.541	+46.682		9	121	+2.539	+59.103		9	+33.554	+37.945							
10	-26.133	+19.871			14	+ 2.573	+14.026			14	+33.998	+ 2.922	64 2853	9.9					
16	-25.963	+15.025	64 2802	9.2	11	+ 3.222	+60.883	63 3237	9.9	16	+34.857	+49.308	64 2854	8.8					
16	-25.955	+25.354	64 2803	9.2	16	+ 3.678	+57.344	63 3238	9.3	13	+35.109	+24.464	64 2855	9.9					
10	-25.501	+15.055			10	+ 5.045	+59.101			9	+35.324	+61.752							
10	-25.273	+44.305			12	+ 5.889	+64.367	63 3239	9.9	20	+36.510	+24.390	64 2856	8.6					
12	-24.847	+ 0.911	64 2804	10.0	12	+ 6.279	+28.932			15	+37.137	+20.594	64 2858	9.4					
11	-24.718	+31.217			11	+ 6.334	+33.680			12	+38.231	+41.430	64 2859	10.0					
10	-24.554	+ 7.395			10	+ 6.970	+32.510			11	+38.422	+34.947	64 2860	10.0					
11	-24.538	+20.655			15	+ 7.017	+17.146	64 2826	9.2	12	+38.606	+13.345	64 2862	9.8					
14	-23.456	+32.114	64 2805	9.8	14	+ 9.065	+15.664	64 2827	9.4	12	+39.075	+34.688	64 2861	9.9					
10	-23.258	+33.970			12	+ 9.283	+18.811	64 2828	9.7	10	+40.276	+49.738	64 2863	10.0					
12	-22.988	+39.289			13	+ 9.377	+10.311	64 2829	9.7	13	+40.695	+14.983	64 2866	9.6					
12	-22.947	+35.088			10	+ 9.757	+52.089			10	+40.816	+25.593	64 2865	9.9					
12	-22.936	+40.774	64 2806	10.0	9	+10.027	+24.197			9	+42.436	+61.030	63 3265	9.9					
13	-22.534	+41.642	64 2808	10.0	18	+10.092	+20.282	64 2830	8.8	12	+42.535	+40.172	64 2869	9.6					
16	-21.992	+ 7.182	64 2807	9.2	24	+11.073	+30.241	64 2831	8.2	11	+42.826	+ 3.930							
12	-21.854	+37.773			10	+11.103	+64.075			10	+43.288	+36.519							
11	-21.538	+12.340			10	+12.073	+39.627			13	+43.298	+17.603	64 2872	9.4					
11	-21.532	+40.264			16	+12.860	+21.284	64 2833	9.2	10	+43.497	+17.925	64 2873	10.0					
12	-21.273	+52.989	64 2809	10.0	14	+13.145	+36.249	64 2834	9.8	11	+44.002	+ 6.085							
11	-21.038	+14.447			10	+14.802	+44.649			14	+45.534	+26.625	64 2874	9.4					
10	-20.956	+ 3.440			12	+14.978	+38.253	64 2835	10.0	9	+45.805	+30.716							
12	-20.134	+40.946			16	+15.801	+ 0.834	64 2836	9.2	11	+45.932	+19.157							
12	-19.729	+46.819			10	+16.462	+27.582			16	+46.222	+ 2.719	64 2877	9.3					
12	-19.271	+44.725			11	+18.850	+36.247			10	+46.287	+37.795	64 2875	9.9					
13	-18.477	+49.957	64 2811	9.9	11	+19.800	+21.990			17	+46.508	+43.016	64 2876	9.0					
15	-16.897	+43.301	64 2813	9.5	12	+20.031	+52.448	64 2837	9.9	16	+48.763	+32.348	64 2878	8.7					
10	-16.745	+58.521			13	+20.479	+45.545	64 2838	9.8	11	+49.138	+22.538							
10	-16.456	+25.074			16	+20.759	+41.541	64 2839	9.1	10	+51.280	+ 6.774	64 2880	10.0					
15	-14.456	+45.128	64 2814	9.2	20	+20.993	+31.727	64 2840	8.6	13	+51.996	+34.225	64 2881	9.4					
12	-13.932	+21.065			9	+21.155	+61.699			12	+52.012	+ 7.712	64 2882	9.9					
13	-13.307	+60.541	63 3218	9.2	9	+21.249	+53.198			10	+52.973	+56.284	63 3274	9.6					
15	-12.739	+21.029	64 2815	9.3	13	+21.554	+29.709	64 2841	10.0	9	+53.175	+64.398	63 3273	10.0					
11	-12.605	+43.394			10	+21.609	+31.739			11	+53.560	+13.596	64 2883	9.7					
9	-12.175	+43.179			17	+21.845	+51.693	64 2842	9.0	12	+54.595	+39.004	64 2884	9.4					
10	-12.066	+46.823			11	+22.044	+19.037			14	+54.956	+ 6.433	64 2885	9.4					
14	-11.185	+44.053	64 2817	9.9	12	+22.315	+58.809	63 3251	9.5	13	+55.515	+11.077	64 2886	9.3					
12	-10.269	+57.744	63 3221	10.0	26	+22.748	+59.244	63 3252	7.5	14	+56.277	+ 2.348	64 2887	9.4					
14	- 9.652	+13.183	64 2818	9.5	16	+23.130	+14.262	64 2843	9.2	13	+56.646	+ 1.286	64 2888	9.4					
9	- 9.494	+22.378			10	+23.714	+35.846			12	+56.896	+ 6.253	64 2889	9.6					
9	- 9.290	+29.250			13	+24.103	+40.227	64 2844	10.0	13	+57.030	+ 2.022	64 2890	9.6					
14	- 8.574	+23.126	64 2819	9.6	10	+25.604	+ 3.469			12	+57.147	+56.224	63 3278	9.0					
11	- 8.479	+37.595			9	+25.723	+ 6.350			16	+59.583	+42.603	64 2891	8.9					
9	- 7.298	+46.437			15	+26.610	+36.021	64 2845	9.6	15	+59.761	+15.153	64 2892	9.0					
9	- 7.182	+55.282			10	+26.770	+64.632	63 3256	9.9	10	+60.296	+26.700	64 2893	9.9					
10	- 7.041	+39.850			14	+27.279	+25.439	64 2847	9.8	15	+61.276	+ 1.713	64 2894	9.4					
10	- 6.874	+26.400			12	+27.310	+30.114			9	+62.515	+19.370	64 2895	10.0					
16	- 6.803	+37.222	64 2820	9.2	14	+27.772	+35.517			13	+63.448	+ 0.350	64 2896	9.6					
17	- 1.968	+64.892	63 3231	8.8	10	+27.786	+35.356	64 2848	9.4	16	+64.675	+17.341	64 2897	9.0					

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
34	-64°867	-33°677	65 2639	8.4	11	-31°364	-6°973			15	+5°338	-34°968	65 2702	9.2	9	+32°832	-8°916		
9	-64°342	-57°538	65 2638	9.6	12	-31°140	-18°189	65 2669	9.9	12	+7°379	-11°085	65 2704	9.9	10	+32°991	-35°667		
18	-63°756	-23°919	65 2641	9.1	16	-30°996	-8°000	65 2670	9.2	11	+7°405	-49°904			9	+33°056	-5°784		
9	-63°241	-41°385	65 2640	9.9	10	-30°798	-25°204			10	+7°432	-27°482			14	+33°245	-59°561	65 2737	10.0
10	-63°050	-11°273			13	-29°788	-42°081	65 2671	9.6	14	+7°828	-53°121	65 2705	9.6	11	+33°272	-36°481	65 2736	9.9
10	-62°503	-2°601			10	-28°965	-4°908			11	+7°991	-22°394	65 2706	10.0	9	+34°122	-36°055		
9	-62°190	-14°786			20	-27°965	-9°877	65 2672	8.6	12	+8°085	-35°237	65 2707	10.0	17	+34°160	-55°073	65 2738	9.4
17	-61°973	-43°197	65 2643	9.0	12	-27°719	-15°931			9	+8°274	-6°858			9	+36°013	-9°573		
24	-61°429	-60°687	65 2642	8.8	11	-27°717	-25°077			12	+8°808	-16°169	65 2708	9.9	10	+36°018	-25°848		
9	-61°104	-55°824			9	-27°551	-14°457			10	+9°128	-25°591			9	+36°381	-34°256		
	241					301					361					421			
13	-60°856	-12°264	65 2645	10.0	12	-27°293	-14°216			9	+9°849	-7°548			9	+36°480	-0°047	64 2857	9.0
15	-59°378	-63°235	65 2644	9.5	12	-26°778	-38°715	65 2673	9.8	9	+11°192	-9°868			9	+36°491	-9°420		
14	-58°582	-44°327	65 2646	9.4	12	-26°408	-10°869	65 2675	9.9	18	+11°232	-30°179	65 2709	8.8	11	+36°695	-39°479	65 2739	10.0
17	-56°007	-47°788	65 2648	9.3	16	-26°347	-46°856	65 2674	9.5	21	+12°184	-1°686	64 2832	8.8	9	+36°803	-34°915		
11	-55°880	-4°180			10	-26°131	-13°197			11	+12°745	-34°145	65 2710	10.0	11	+37°122	-22°573		
16	-53°727	-46°188	65 2649	9.3	13	-24°175	-53°104	65 2676	9.8	9	+12°906	-37°715			9	+37°540	-49°792		
16	-53°210	-9°562	65 2650	9.5	15	-24°030	-52°405	65 2677	9.8	10	+14°393	-25°515	65 2711	9.8	9	+37°644	-49°338		
9	-51°807	-11°680	65 2653	10.0	12	-23°781	-29°275	65 2678	9.9	10	+14°478	-25°513			9	+38°363	-15°879		
9	-51°769	-49°000			11	-22°888	-16°699			15	+14°656	-43°391	65 2712	9.4	11	+38°656	-50°608	65 2740	10.0
11	-51°696	-12°226	65 2654	10.0	9	-22°181	-0°629			13	+15°480	-60°183	65 2714	9.8	10	+39°668	-7°055	64 2864	10.0
	251					311					371					431			
48	-51°278	-14°841	65 2655	7.1	9	-20°415	-12°943			11	+15°545	-41°048	65 2713	9.6	12	+39°901	-36°794	65 2741	9.7
44	-51°235	-42°344	65 2652	7.0	11	-20°137	-14°560			14	+15°921	-30°249	65 2715	9.1	17	+40°504	-4°245	64 2867	9.0
9	-50°694	-12°324			21	-18°757	-3°410	64 2810	8.2	14	+15°997	-30°292			21	+40°531	-58°863	65 2742	8.4
16	-49°521	-51°206	65 2656	9.6	10	-18°041	-29°455			9	+16°403	-44°239			9	+40°553	-31°405		
14	-49°348	-43°272	65 2657	9.2	9	-17°229	-14°296			12	+16°657	-36°237	65 2716	9.9	20	+40°669	-6°686	64 2868	8.6
9	-47°960	-19°642			12	-16°552	-3°754	64 2812	9.7	51	+16°767	-43°613	65 2718	7.0	9	+41°693	-7°643		
9	-47°676	-7°347			13	-16°502	-37°022	65 2679	9.8	17	+16°858	-14°171	65 2717	8.8	21	+41°699	-2°416	64 2870	8.8
13	-47°643	-4°648	64 2784	9.7	11	-16°168	-6°349			11	+17°128	-15°881	65 2719	10.0	15	+41°945	-8°915	65 2743	9.2
9	-47°314	-61°881			12	-15°669	-34°821	65 2680	10.0	9	+17°628	-10°483			12	+42°450	-36°204	65 2744	9.6
16	-47°034	-58°902	65 2658	9.4	16	-14°892	-39°999	65 2681	8.8	14	+18°695	-31°128	65 2720	9.5	9	+42°649	-6°001	64 2871	9.9
	261					321					381					441			
14	-45°919	-32°749	65 2659	9.6	9	-14°363	-64°973	65 2682	10.0	16	+18°742	-39°508	65 2722	9.2	9	+42°984	-35°795		
9	-45°183	-36°755			21	-13°306	-52°269	65 2683	8.4	12	+18°816	-20°767	65 2721	9.9	10	+43°390	-10°205		
12	-45°178	-26°722			16	-13°010	-47°837	65 2684	9.2	9	+19°020	-21°075			12	+44°795	-52°668	65 2746	10.0
9	-44°190	-50°319			9	-12°486	-2°596			17	+19°265	-12°767	65 2723	9.1	12	+46°517	-10°353	65 2747	9.6
10	-43°364	-34°758			12	-12°212	-43°399			13	+20°069	-61°731	65 2724	9.8	9	+46°940	-9°573	65 2749	10.0
12	-43°221	-24°671			9	-11°523	-53°544			24	+20°684	-9°383	65 2725	8.2	9	+46°932	-9°930	65 2748	10.0
9	-43°151	-11°986			13	-11°483	-2°430	64 2816	9.6	9	+20°804	-32°133			9	+47°452	-43°481		
10	-42°996	-43°431			13	-11°359	-24°325	65 2685	9.8	15	+21°006	-40°461	65 2726	9.2	13	+48°819	-23°904	65 2750	9.6
12	-42°633	-16°163	65 2660	10.0	30	-10°675	-22°136	65 2686	8.3	14	+21°506	-40°559	65 2727	9.4	9	+48°877	-25°383		
11	-41°893	-20°755			11	-9°367	-29°813	65 2687	9.9	10	+21°603	-28°026			10	+48°930	-40°113		
	271					331					391					451			
9	-41°490	-41°091			9	-7°560	-47°741			19	+21°726	-45°422	65 2728	8.5	17	+50°498	-0°212	64 2879	9.0
9	-41°005	-13°381			13	-6°653	-38°866	65 2689	9.6	9	+21°877	-11°484			9	+51°148	-28°736		
16	-40°459	-35°446	65 2662	9.4	10	-6°592	-60°629			10	+22°058	-53°836			11	+51°343	-19°705	65 2751	10.0
26	-40°364	-44°546	65 2661	8.5	10	-6°175	-5°034	64 2821	9.9	9	+22°705	-11°972			11	+51°661	-35°002	65 2752	9.8
14	-39°975	-4°538	64 2791	9.4	9	-6°470	-55°573	65 2688	9.9	22	+22°814	-63°723	65 2729	8.8	9	+52°265	-60°710	65 2753	10.0
11	-39°919	-23°121			13	-5°947	-40°059	65 2690	9.4	13	+23°380	-44°559	65 2730	9.9	15	+54°264	-53°649	65 2755	9.4
11	-39°537	-25°449			14	-5°921	-16°894	65 2691	9.4	11	+23°406	-6°332			11	+54°684	-14°669	65 2754	9.9
10	-38°705	-4°793			11	-4°713	-24°382	65 2692	9.9	19	+23°654	-63°717	65 2731	8.9	10	+57°007	-35°741	65 2756	9.7
9	-37°532	-18°209			12	-4°153	-23°724	65 2693	10.0	10	+23°978	-48°393			13	+57°261	-39°088	65 2757	9.4
13	-37°281	-13°227	65 2664	9.9	13	-4°075	-17°674	65 2694	9.9	40	+26°283	-22°548	65 2732	7.9	9	+57°388	-15°107		
	281					341					401					461			
17	-36°527	-12°989	65 2665	9.1	21	-3°840	-7°737	65 2695	8.7	10	+26°498	-34°614			9	+60°906	-54°636	65 2761	9.8
13	-36°477	-3°850			30	-2°993	-52°537	65 2696	8.4	12	+26°602	-39°353			9	+60°922	-43°777		
17	-36°209	-61°532	65 2663	9.2	15	-2°302	-62°062	65 2697	9.5	16	+26°696	-4°541	64 2846	9.0	10	+61°511	-63°412	65 2763	9.7
9	-35°743	-9°631			12	-2°041	-39°337	65 2698	10.0	16	+26°877	-58°295	65 2733	9.4	16	+61°617	-22°562	65 2758	8.8
10	-35°412	-50°485	65 2666	9.9	14	-0°397	-27°336	65 2699	9.6	10	+27°534	-2°175			10	+61°845	-25°158	65 2760	10.0
34	-35°130	-51°535	65 2667	7.9	13	-0°235	-52°487	65 2700	10.0	9	+27°660	-35°923			11	+61°897	-30°509	65 2762	9.6
9	-33°421	-38°137			11	+2°062	-29°672	65 2701	10.0	12	+29°404	-11°586			9	+64°405	-60°192	65 2764	10.0
12	-32°982	-11°698			9	+2°206	-42°052			9	+29°752	-26°761							
12	-32°886	-6°367	64 2799	9.9	10	+2°356	-0°129			10	+30°408	-33°242							
20	-32°288	-62°015	65 2668	8.8	9	+3°195	-4°836			13	+30°903	-3°513	64 2850	10.0					

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 14 ^h 33 ^m , - 65°. Plate 993. 1894, June 2. PROVISIONAL CONSTANTS. a = - .01133 d = + .00055 b = - .00039 e = - .01130 c = + .0291 f = - .0873 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51, 18 -42°633 +49°004 64 2914 9°3 12 -42°442 +31°060 64 2913 10°0 25 -42°399 +1°190 64 2910 9°0 18 -41°919 +36°801 64 2915 9°3 9 -41°836 +24°461 11 -41°150 +33°977 15 -40°768 +47°312 64 2916 9°9 13 -40°628 +48°514 64 2917 9°9 9 -40°173 +20°565 12 -40°137 +37°195 61 11 -39°940 +38°768 17 -38°866 +61°758 63 3307 10°0 13 -38°682 +22°279 64 2919 9°9 14 -38°638 +4°068 64 2918 9°7 27 -38°202 +51°208 64 2921 8°8 30 -38°179 +59°277 63 3308 8°8 14 -37°766 +50°990 64 2922 9°9 10 -37°696 +16°801 23 -37°575 +22°335 64 2920 9°2 27 -37°178 +33°409 64 2923 8°9 71 16 -36°686 +43°101 64 2926 9°8 14 -36°631 +26°378 64 2924 9°8 11 -36°486 +37°590 24 -35°852 +38°173 64 2928 9°0 11 -35°187 +4°932 64 2927 9°8 16 -34°963 +35°971 64 2929 9°4 13 -34°651 +34°168 64 2931 9°7 14 -34°463 +25°204 64 2930 9°8 13 -34°401 +59°582 10 -32°880 +7°957 81 12 -32°031 +30°963 10 -31°771 +9°338 10 -31°490 +7°284 14 -30°706 +40°437 17 -30°154 +42°389 64 2932 9°4 9 -29°909 +27°382 10 -29°127 +2°262 13 -28°946 +60°794 9 -28°496 +50°962 15 -27°839 +37°028 64 2933 9°6 91 10 -27°397 +25°414 20 -27°275 +21°263 64 2935 9°2 15 -26°832 +63°320 63 3320 10°0 11 -26°756 +33°463 12 -26°364 +36°917 } 64 2936 10°0 12 -26°229 +37°160 25 -26°182 +58°792 63 3321 9°0 21 -25°473 +2°597 64 2937 9°3 15 -25°333 +38°500 64 2939 9°7 22 -24°628 +2°101 64 2938 9°2 101 14 -24°284 +41°201 64 2941 9°6 26 -23°694 +45°678 64 2942 8°9 17 -23°639 +61°010 63 3323 9°6 14 -23°067 +54°444 63 3325 9°7 13 -22°830 +47°624 64 2943 9°8 14 -22°359 +60°368 63 3328 9°7 24 -22°165 +17°057 64 2944 9°2 14 -20°773 +60°540 17 -20°737 +34°933 64 2945 9°4 14 -20°365 +39°147					111, 25 -20°157 +18°731 64 2946 9°2 26 -19°779 +30°008 64 2947 8°9 13 -18°867 +59°124 26 -18°853 +48°221 64 2949 8°7 15 -18°526 +0°485 64 2948 9°6 12 -18°489 +44°831 13 -17°474 +36°049 64 2950 9°8 9 -17°436 +54°188 15 -16°348 +44°787 14 -16°236 +46°381 64 2951 9°6 121 9 -16°023 +5°896 16 -15°859 +58°129 63 3339 9°6 10 -15°700 +7°064 31 -15°625 +19°741 64 2952 8°9 9 -13°281 +21°919 11 -12°857 +64°346 10 -12°825 +4°580 64 2953 10°0 12 -12°387 +37°825 29 -12°364 +46°218 64 2955 8°5 15 -12°266 +28°152 64 2954 9°4 131 13 -12°242 +51°620 9 -11°869 +19°582 64 2956 10°0 13 -11°534 +37°427 28 -11°433 +61°984 63 3345 8°9 10 -11°289 +57°676 12 -10°658 +48°152 13 -10°081 +60°180 44 -9°252 +43°798 64 2957 8°0 12 -8°858 +46°013 25 -8°431 +36°699 64 2958 9°0 141 12 -8°286 +62°388 22 -7°010 +14°550 64 2959 9°4 10 -6°790 +22°232 64 2960 9°9 10 -5°230 +57°034 34 -5°171 +36°425 64 2961 8°6 11 -4°847 +11°292 64 2962 9°9 17 -4°437 +61°552 63 3353 9°6 15 -4°392 +10°716 64 2963 9°6 44 -3°203 +0°874 64 2964 8°0 13 -2°579 +44°460 64 2965 10°0 151 11 -2°564 +45°672 18 -2°473 +62°418 63 3357 9°9 11 -2°213 +25°099 64 2967 9°7 11 -1°109 +62°604 11 -0°852 +46°063 22 -0°724 +23°480 64 2969 9°2 21 -0°510 +23°824 64 2970 9°3 13 -0°234 +36°511 11 -0°181 +64°234 64 2971 9°3 22 +0°636 +9°824 161 12 +0°698 +59°715 14 +0°747 +55°253 63 3362 9°9 10 +1°085 +49°304 11 +1°095 +49°383 18 +2°261 +63°921 63 3366 9°6 15 +4°062 +33°017 64 2972 9°9 11 +4°531 +49°327 12 +4°780 +46°473 19 +4°927 +10°365 64 2973 9°3 11 +5°537 +18°834 64 2974 9°4					171, 15 +6°490 +50°073 64 2975 9°6 9 +6°681 +13°701 9 +6°727 +38°439 13 +6°814 +30°587 64 2976 10°0 13 +7°411 +49°388 9 +7°808 +27°530 13 +7°900 +60°611 17 +8°351 +63°624 63 3379 9°6 19 +9°253 +16°459 64 2978 9°3 107 +9°278 +28°012 64 2977 3°7 181 21 +9°412 +54°643 63 3380 9°0 12 +9°851 +48°665 19 +10°716 +48°861 64 2979 9°3 14 +12°222 +38°947 64 2980 10°0 48 +12°311 +12°135 64 2981 7°5 10 +13°104 +55°427 10 +13°166 +59°889 27 +14°026 +8°946 64 2983 9°2 18 +14°032 +47°887 64 2982 9°4 12 +14°036 +51°151 191 10 +14°040 +50°816 30 +14°092 +22°402 64 2984 9°0 12 +14°314 +24°148 64 2985 9°9 13 +14°727 +47°413 26 +15°677 +35°878 64 2986 9°0 12 +16°231 +33°033 36 +16°495 +22°884 64 2987 8°4 18 +17°416 +23°741 64 2988 9°4 11 +17°488 +25°232 64 2989 9°8 17 +17°645 +40°790 64 2990 9°4 201 17 +17°910 +26°862 64 2991 9°0 14 +18°035 +13°454 64 2992 9°6 16 +20°999 +0°659 64 2993 9°4 9 +21°660 +28°990 13 +22°027 +50°716 64 2994 9°9 10 +22°150 +6°860 14 +22°184 +3°588 64 2996 9°8 14 +22°283 +18°836 64 2995 9°8 17 +22°977 +45°924 64 2997 9°6 10 +23°422 +25°824 211 13 +26°385 +43°477 64 2999 9°9 14 +27°222 +58°638 10 +27°708 +26°779 11 +29°474 +33°911 29 +29°526 +29°495 64 3002 8°8 15 +30°212 +16°403 64 3003 9°9 13 +30°572 +61°929 21 +30°576 +2°249 64 3004 9°2 12 +31°923 +33°861 9 +32°576 +26°582 221 19 +33°647 +40°573 64 3005 9°3 21 +34°164 +47°178 64 3007 9°2 13 +34°680 +31°513 15 +34°757 +64°886 12 +34°802 +25°991 64 3009 9°7 29 +35°152 +53°104 64 3008 8°8 9 +35°391 +21°274 23 +36°410 +39°808 64 3010 9°0 18 +36°701 +63°310 12 +37°654 +47°360				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
19	+37.846	+40.142	64 3011	9.2	20	-42.069	-4.744	64 2911	9.4	20	-11.802	-26.652	65 2800	9.3	19	+5.846	-35.803	65 2829	9.4
35	+37.907	+56.973	63 3403	8.2	13	-41.472	-40.128	65 2772	10.0	10	-11.723	-14.835	65 2801	9.9	13	+6.128	-13.865	65 2830	9.3
9	+38.593	+21.532			9	-41.188	-26.690			9	-11.281	-27.074			34	+6.354	-27.663	65 2831	8.8
14	+40.204	+33.967			11	-41.021	-14.001			9	-11.107	-50.288			9	+7.147	-15.055	65 2832	10.0
18	+42.870	+58.928			10	-40.703	-13.197			9	-11.087	-46.028			9	+7.496	-22.119		
16	+44.599	+52.583			17	-39.920	-44.607	65 2774	9.4	10	-10.789	-52.418			12	+8.343	-32.203	65 2833	10.0
13	+45.041	+31.682	64 3012	9.6	15	-39.651	-57.355	65 2773	10.0	9	-10.533	-59.866			26	+8.510	-15.941	65 2835	8.8
16	+45.259	+48.143			11	-39.475	-14.709			10	-10.493	-48.232			25	+8.524	-28.135	65 2834	9.0
15	+49.370	+33.001	64 3014	10.0	29	-38.878	-35.004	65 2775	8.8	18	-10.424	-45.497	65 2802	9.4	12	+8.583	-31.703	65 2836	10.0
24	+49.828	+51.826	64 3013	9.3	18	-38.664	-36.172	65 2776	9.3	11	-10.099	-31.059			19	+9.722	-13.460	65 2837	9.4
	241					301					361					421			
16	+50.383	+47.015			9	-37.222	-27.636			20	-10.084	-23.651	65 2803	9.0	9	+11.216	-52.630		
20	+51.568	+9.178	64 3016	9.2	9	-37.022	-0.676			10	-9.817	-7.110	65 2804	9.9	9	+11.471	-25.101		
29	+51.666	+61.149	63 3417	9.4	11	-36.622	-57.132			10	-9.258	-45.654			10	+11.844	-47.231		
16	+52.829	+51.624	64 3015	9.6	10	-35.737	-50.841			9	-9.150	-45.978			22	+12.255	-17.639	65 2838	9.3
18	+53.145	+50.702			11	-35.681	-5.045	64 2925	9.9	10	-9.143	-34.317			42	+12.539	-11.401	65 2839	8.2
28	+53.328	+64.826	63 3418	9.6	10	-34.947	-32.598			11	-8.674	-44.682			23	+12.728	-10.031	65 2840	9.0
20	+55.285	+27.555	64 3017	9.4	19	-33.517	-18.892	65 2777	9.4	14	-8.649	-60.455			9	+13.306	-54.574		
33	+57.595	+54.017	63 3421	9.0	14	-33.493	-12.508	65 2778	9.7	11	-8.216	-40.604			24	+13.485	-13.093	65 2841	8.9
24	+57.726	+58.643			11	-33.206	-17.148	65 2779	10.0	10	-8.191	-11.466	65 2806	10.0	18	+13.776	-25.572	65 2842	9.2
10	+57.767	+11.501			10	-32.395	-43.383			10	-8.142	-45.866			25	+14.344	-31.123	65 2843	8.9
	251					311					371					431			
20	+58.399	+29.409	64 3018	9.3	23	-31.031	-18.334	65 2781	9.2	13	-8.065	-21.322	65 2805	9.9	9	+16.458	-1.923		
9	+58.461	+29.150			10	-30.306	-18.685			12	-7.367	-40.799			12	+16.572	-21.150	65 2844	9.8
25	+58.995	+57.579			12	-30.227	-42.160			17	-7.296	-37.937	65 2807	9.6	34	+17.506	-62.789	65 2845	8.4
9	+59.529	+51.931	64 3019	10.0	12	-30.127	-57.592	65 2780	10.0	20	-7.046	-37.207	65 2808	9.4	14	+18.457	-22.435	65 2846	9.4
12	+60.236	+25.860	64 3020	9.9	9	-29.770	-58.152			10	-6.633	-34.876			13	+18.675	-18.024	65 2847	9.6
16	+61.037	+36.784	64 3021	9.9	30	-29.622	-48.275	65 2782	8.9	18	-6.382	-47.202	65 2809	9.4	23	+19.018	-19.794	65 2848	9.2
10	-63.886	-40.624			9	-29.313	-13.510			9	-6.150	-35.747			13	+20.314	-49.699	65 2849	9.8
9	-63.880	-2.943			22	-27.664	-63.881	65 2783	9.2	10	-5.883	-52.173			9	+23.140	-8.068		
9	-63.457	-30.701			9	-27.498	-43.484			14	-5.325	-33.719	65 2810	9.6	22	+23.591	-45.452	65 2850	9.2
12	-62.917	-20.097	65 2751	10.0	10	-27.308	-50.338	65 2784	10.0	10	-4.871	-41.726			12	+23.628	-1.166	64 2998	9.9
	261					321					381					441			
11	-62.477	-29.111			32	-26.831	-1.523	64 2934	9.0	10	-4.477	-39.491			16	+23.933	-44.240	65 2851	9.6
15	-61.520	-35.312	65 2752	9.8	9	-25.956	-51.736			12	-4.341	-10.301	65 2811	10.0	16	+25.945	-40.621	65 2853	9.7
14	-59.919	-14.831	65 2754	9.9	25	-24.870	-61.463	65 2785	8.9	16	-3.815	-51.507	65 2812	9.6	20	+26.136	-19.118	65 2852	9.2
10	-59.130	-60.921	65 2753	10.0	9	-24.707	-5.450			22	-2.907	-60.705	65 2813	9.2	10	+26.380	-2.953	64 3000	9.8
25	-57.632	-53.735	65 2755	9.4	10	-24.649	-19.028			12	-2.904	-30.243			14	+26.572	-51.958		
10	-57.216	-15.078			17	-23.938	-48.757	65 2786	9.6	15	-2.753	-43.188	65 2814	9.8	30	+27.161	-48.994	65 2855	8.6
17	-56.147	-35.689	65 2756	9.7	15	-23.746	-5.740	64 2940	9.6	9	-2.170	-49.556			13	+27.689	-3.633	64 3001	9.9
19	-55.657	-39.006	65 2757	9.4	9	-23.597	-9.604			17	-2.078	-4.907	64 2966	9.4	10	+28.199	-40.730		
10	-55.192	-6.338			13	-23.107	-24.209	65 2787	9.8	34	-1.960	-1.598	64 2968	8.8	16	+28.592	-60.603	65 2856	9.6
28	-52.473	-22.205	65 2758	8.8	18	-22.968	-10.970	65 2788	9.5	14	-1.646	-56.594			23	+29.660	-37.468	65 2857	9.2
	271					331					391					451			
11	-52.073	-24.791	65 2760	10.0	9	-22.636	-42.035			9	-1.603	-54.708			10	+29.886	-17.750		
9	-51.728	-3.762			16	-22.521	-26.234	65 2789	9.6	17	-0.694	-7.885	65 2815	9.4	27	+30.771	-42.294	65 2858	9.0
13	-51.688	-43.409			10	-22.273	-56.200			9	-0.501	-35.795			10	+31.071	-13.532		
13	-51.636	-30.122	65 2762	9.6	10	-22.208	-42.454			14	+0.175	-36.767	65 2816	10.0	15	+31.529	-14.497	65 2860	9.4
9	-51.502	-2.962			12	-20.755	-21.407			10	+0.724	-40.760			10	+32.782	-28.257		
13	-50.949	-54.230	65 2761	9.8	10	-19.676	-58.103			12	+1.471	-43.441	65 2817	10.0	13</				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.				
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.			
	471				PLATE CENTRE. 14 ^h 51 ^m , - 65 ^a . Plate 964. 1894, May 28. PROVISIONAL CONSTANTS. a = - .01160. d = - .00067 b = + .00060. e = - .01144 c = + .0121. f = - .0622 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																	
10	+41.016	-53.053	65 2869	8.9	16	-64.547	+ 8.688	64 3016	9.2	10	-28.375	+15.490				111	+ 0.942	+51.771				
40	+41.757	-02.315	65 2874	7.7	14	-62.157	+27.273	64 3017	9.4	10	-27.810	+58.948				10	+ 1.539	+49.129				
10	+41.983	-38.404	65 2873	9.3	10	-61.963	+58.471			18	-27.699	+29.270	64 3034	9.2		9	+ 1.811	+56.613				
16	+42.248	-24.043	65 2872	9.4	20	-61.752	+53.846	63 3421	9.0	12	-27.019	+ 4.668	64 3035	9.7		11	+ 2.204	+64.900				
38	+42.305	-19.866	65 2871	7.8	10	-60.882	+43.969			36	-26.417	+ 7.854	64 3036	8.4		9	+ 2.538	+30.291				
20	+42.904	-29.513	65 2875	9.0	11	-60.642	+57.466			9	-26.019	+30.714				11	+ 3.449	+10.876	64 3058	10.0		
12	+43.272	-63.804	65 2877	9.7	11	-59.703	+51.879	64 3019	10.0	9	-25.991	+29.696				16	+ 3.662	+48.417	64 3059	9.7		
23	+43.310	-27.095	65 2876	9.4	15	-59.193	+29.337	64 3018	9.3	12	-25.373	+37.874	64 3037	10.0		10	+ 4.256	+62.934				
9	+43.491	-42.586			11	-59.113	+29.093			9	-25.140	+43.724				19	+ 5.652	+25.242				
15	+43.546	-59.846	65 2878	9.8	9	-58.893	+15.246			10	-24.473	+38.732				12	+ 6.131	+23.886				
	481				11	-58.522	+11.449				61						121					
10	+44.026	-39.813			9	-57.939	+36.465			10	-23.807	+32.175				15	+ 6.188	+ 6.586	64 3061	9.2		
10	+44.235	- 5.082			13	-57.103	+36.891	64 3021	9.9	22	-23.862	+55.014	63 3449	8.3		10	+ 6.763	+ 0.976				
11	+44.532	-43.575	65 2882	9.9	13	-57.100	+25.951	64 3020	9.9	18	-23.215	+32.625	64 3038	9.2		10	+ 7.140	+26.626				
11	+46.786	-12.987	65 2880	9.6	9	-54.800	+42.228			9	-23.009	+54.271	64 3039	9.8		9	+ 8.086	+45.519				
11	+47.175	-33.028	65 2883	9.9	9	-54.341	+ 6.370			10	-22.798	+47.682				10	+ 8.136	+ 1.276				
17	+47.307	- 9.715	65 2881	9.4	13	-54.170	+48.521	64 3022	10.0	14	-22.547	+51.134	64 3040	9.4		15	+ 8.502	+25.179	64 3063	9.6		
11	+47.371	-34.248	65 2884	9.8	12	-52.633	+45.904			14	-22.386	+50.055				22	+ 8.674	+16.427	64 3064	9.0		
20	+47.568	-50.418	65 2885	9.4	9	-51.513	+42.566			10	-20.404	+48.468				11	+ 8.791	+57.833				
10	+49.169	-46.995			9	-51.289	+42.195			13	-20.268	+46.129				10	+ 9.439	+57.155				
15	+49.294	-21.250	65 2886	9.4	9	-50.233	+29.312			14	-19.024	+33.330	64 3042	9.6		9	+ 9.460	+25.670				
	491				15	-50.079	+14.170	64 3023	9.6		71						131					
44	+51.199	-16.724	65 2887	7.5	18	-49.613	+60.212	63 3425	9.0	16	-18.769	+36.694	64 3043	9.4		18	+10.413	+43.074	64 3065	9.3		
11	+51.803	-32.967			10	-48.180	+13.717			12	-18.604	+37.123	64 3044	10.0		50	+11.077	+50.103	64 3066	6.4		
23	+52.933	-58.771	65 2888	9.3	13	-46.570	+55.764	63 3431	9.4	9	-18.411	+38.897				14	+11.724	+43.349	64 3067	10.0		
9	+53.479	-44.661			10	-46.540	+39.957			10	-17.897	+32.710				9	+12.753	+17.155				
9	+54.070	-24.456			12	-46.128	+55.485	63 3432	10.0	38	-17.460	+15.300	64 3045	8.0		13	+12.802	+23.675	64 3068	10.0		
47	+54.649	-18.878	65 2889	7.6	10	-45.906	+41.046			9	-17.225	+38.005				15	+13.715	+49.168	64 3069	9.6		
23	+54.957	-61.328	65 2894	9.3	11	-45.602	+53.080			9	-17.018	+51.182				10	+13.728	+62.182				
12	+55.126	-50.857	65 2893	9.6	18	-45.234	+36.017	64 3024	9.2	9	-16.617	+11.860				11	+14.143	+49.335				
20	+55.143	-34.089	65 2891	9.3	10	-43.057	+24.085			13	-16.478	+40.497	64 3046	10.0		13	+14.220	+ 4.309	64 3070	9.9		
20	+55.214	-34.510	65 2892	9.3	10	-42.398	+52.941			12	-16.277	+27.421				11	+15.055	+22.767				
	501				20	-41.306	+39.089	64 3025	9.2		81						141					
56	+56.588	-52.108	65 2895	7.7	10	-41.250	+ 0.935			11	-15.809	+33.975				16	+15.831	+63.486	63 3474	9.4		
10	+58.136	-11.763			12	-40.501	+49.586	64 3028	10.0	34	-15.785	+18.704	64 3047	8.7		13	+16.175	+62.280	63 3475	9.6		
10	+62.095	-36.001	65 2898	10.0	11	-40.228	+14.230	64 3026	9.7	13	-15.359	+57.402				12	+16.988	+46.345				
11	+62.786	-35.403	65 2900	10.0	15	-40.080	+28.723	64 3027	10.0	10	-14.195	+57.650				32	+18.097	+88.738	64 3072	8.5		
28	+62.958	-49.006	65 2901	8.9	16	-38.885	+49.825	64 3030	9.2	10	-14.141	+57.196				10	+18.195	+37.352				
11	+63.139	-15.146	65 2899	10.0	12	-38.854	+51.449			10	-14.014	+46.052				9	+18.223	+35.044				
					20	-38.527	+29.622	64 3029	9.0	11	-13.845	+ 3.282	64 3048	10.0		9	+18.769	+56.718				
					41					9	-12.666	+47.896				10	+19.342	+45.053				
					20	-37.589	+28.675	64 3031	9.0	10	-12.617	+54.425				10	+19.356	+56.859				
					9	-36.982	+62.204				91					18	+19.830	+61.994	63 3476	9.3		
					12	-36.293	+ 5.080			13	-12.591	+20.566	64 3049	9.8		22	+20.152	+26.352	64 3073	8.6		
					11	-36.217	+ 1.118			14	-12.320	+28.873	64 3051	9.6		12	+20.280	+54.955				
					9	-34.663	+54.436			11	-12.097	+24.811				9	+20.587	+22.186				
					10	-33.290	+10.682			16	-12.057	+21.928	64 3052	9.2		13	+20.701	+ 1.796	64 3074	10.0		
					15	-31.628	+ 3.920	64 3032	9.4	9	-11.108	+26.493				13	+21.409	+42.011				
					12	-30.399	+58.240			10	-10.467	+38.755				12	+21.650	+38.932				
					10	-28.788	+54.353			12	- 9.869	+42.660				13	+21.776	+20.554	64 3075	9.6		
					15	-28.499	+39.312	64 3033	9.7	14	- 6.543	+61.543	63 3461	9.9		9	+21.909	+40.529				
										10	- 6.110	+61.650				12	+23.442	+29.066				
										9	- 4.351	+54.620	63 3462	10.0		12	+23.987	+22.872	64 3076	10.0		
										42	- 4.138	+24.330	64 3053	7.9		9	+24.082	+25.756				
										9	- 3.794	+15.884				18	+24.534	+49.062	64 3077	9.2		
										14	- 3.514	+46.035	64 3054	9.6		12	+27.902	+50.455				
										11	- 3.245	+51.986				14	+28.368	+59.205	63 3484	9.8		
										10	- 3.026	+54.949				13	+29.427	+ 0.957				
										12	- 2.525	+27.306	64 3055	10.0		11	+30.119	+20.566				
										13	- 0.865	+30.736	64 3056	9.8		10	+30.377	+11.747				
										17	- 0.544	+49.370	64 3057	9.3		13	+31.377	+15.954	64 3081	9.9		
										9	+ 0.156	+21.380				15	+31.712	+46.312	64 3080	9.6		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
15	+32°797	+58°088	63 349I	9'4	15	-63°822	-57°018	65 2885	9'4	14	-31°106	-48°353	65 2915	9'7	13	+6°853	-38°633	65 2942	10'0
10	+32°877	+1°739			42	-63°038	-17°175	65 2887	7'5	9	-30°663	-43°979			12	+7°128	-53°153	65 2943	9'2
10	+32°979	+56°270			10	-62°905	-47°490			15	-30°641	-53°151	65 2916	9'9	18	+7°262	-52°989		
9	+33°439	+12°303			12	-61°267	-33°318			22	-30°355	-23°784	65 2917	8'9	22	+7°356	-43°125	65 2944	9'0
18	+34°911	+30°899	64 3082	9'3	9	-60°808	-21°836			66	-29°880	-35°509	65 2918	6'0	13	+7°820	-5°008	64 3062	9'6
10	+35°735	+9°316			10	-60°031	-63°301			10	-28°673	-38°081			12	+7°988	-58°655		
13	+35°860	+38°919	64 3083	9'7	11	-59°633	-24°687			9	-28°087	-6°827			21	+8°666	-50°946	65 2945	9'2
15	+36°673	+36°598	64 3084	9'8	36	-59°460	-19°066	65 2889	7'6	24	-27°794	-48°653	65 2919	8'8	13	+8°833	-22°412	65 2946	9'9
21	+36°687	+57°953	63 3494	8'9	11	-58°777	-44°863			14	-27°365	-30°233	65 2920	9'6	14	+8°853	-24°572	65 2947	10'0
13	+38°132	+51°065	64 3085	10'0	16	-58°304	-58°981	65 2888	9'3	11	-27°042	-24°048			10	+10°062	-37°605		
	181					241					301					361			
11	+38°249	+39°274			18	-57°858	-34°206	65 2891	9'3	10	-25°992	-15°098			50	+11°696	-31°240	65 2948	7'7
20	+38°320	+17°888	64 3086	9'0	20	-57°755	-34°624	65 2892	9'3	11	-25°520	-38°135			10	+12°969	-35°998		
10	+39°722	+33°437			14	-56°688	-50°908	65 2893	9'6	30	-25°514	-42°326	65 2921	8'9	12	+13°333	-45°934		
12	+39°914	+50°029	64 3087	10'0	11	-56°492	-11°719			11	-25°379	-54°358			10	+14°037	-46°505		
14	+39°947	+8°446	64 3088	9'4	15	-56°078	-61°365	65 2894	9'3	9	-25°326	-57°039			11	+14°722	-26°461		
10	+40°588	+22°052			9	-56°075	-34°983			10	-24°463	-6°124			12	+15°097	-61°619		
14	+41°004	+26°140	64 3089	9'6	9	-56°046	-61°375			18	-24°325	-21°356	65 2922	9'2	26	+17°451	-3°087	64 3071	8'8
9	+42°533	+18°890			49	-55°127	-52°063	65 2895	7'7	13	-23°319	-62°411			10	+17°833	-44°718		
12	+42°579	+6°842			9	-52°644	-40°959			17	-20°721	-9°092	65 2923	9'2	11	+18°399	-21°780		
11	+43°557	+47°858			13	-51°271	-14°729	65 2899	10'0	9	-20°305	-57°452			11	+18°559	-64°694		
	191					251					311					371			
10	+43°817	+11°236			13	-50°817	-35°595	65 2898	10'0	24	-20°228	-0°081	64 3041	9'2	13	+18°709	-31°477		
16	+43°968	+42°227	64 3091	9'4	9	-50°505	-53°277			9	-19°285	-29°353			9	+19°177	-19°384		
14	+44°227	+45°482	64 3093	9'6	13	-50°160	-34°964	65 2900	10'0	10	-18°629	-38°725			22	+19°632	-43°523	65 2949	9'2
23	+44°485	+46°929	64 3092	8'5	11	-50°155	-52°653			16	-18°487	-10°112	65 2924	9'2	10	+21°239	-50°012		
9	+45°114	+42°271			24	-49°016	-48°522	65 2901	8'9	14	-17°179	-20°166	65 2925	9'4	13	+21°417	-23°946	65 2950	9'8
12	+47°282	+7°049			11	-48°253	-34°154			13	-16°730	-28°332	65 2926	9'9	24	+21°713	-34°829	65 2951	8'7
19	+47°355	+18°231	64 3094	9'2	11	-48°094	-31°262			9	-15°723	-18°891			12	+22°067	-29°426		
11	+47°432	+4°468			10	-47°955	-43°331			9	-15°647	-39°819			12	+22°295	-48°875		
12	+48°061	+14°978			11	-46°896	-11°560			10	-14°673	-46°456			12	+22°918	-30°179		
9	+48°366	+17°337			12	-46°623	-62°704			10	-14°573	-46°272			13	+23°144	-31°515		
	201					261					321					381			
10	+48°426	+5°253			12	-45°701	-51°611			9	-13°513	-33°755			10	+23°527	-57°169		
9	+49°742	+24°273			11	-45°580	-60°561			12	-12°030	-2°902	64 3050	10'0	21	+24°071	-50°004	65 2952	9'4
9	+50°140	+61°480			23	-45°498	-14°633	65 2904	8'9	9	-11°539	-56°576			11	+24°383	-21°986		
12	+50°235	+15°749			11	-45°492	-58°629			10	-9°023	-3°909			11	+24°423	-50°217		
18	+50°360	+60°520	63 3507	9'2	11	-44°678	-27°139			16	-8°827	-25°403	65 2927	9'3	22	+25°011	-38°375	65 2953	9'2
13	+51°077	+7°830			14	-44°413	-53°999	65 2903	9'9	11	-8°221	-25°314	65 2928	10'0	26	+25°013	-54°836	65 2955	8'8
9	+51°562	+15°517			34	-44°384	-23°619	65 2905	8'4	14	-7°163	-39°057	65 2929	10'0	14	+25°056	-55°535	65 2954	9'6
9	+52°562	+11°444			9	-42°760	-36°672			36	-6°939	-23°820	65 2930	8'2	38	+25°186	-47°489	65 2956	8'3
10	+52°769	+31°888			9	-42°582	-40°003			12	-5°533	-59°198			13	+25°263	-40°708		
40	+53°924	+6°000	64 3095	7'9	14	-42°524	-57°658	65 2906	9'9	10	-5°069	-58°401			15	+26°059	-10°338	65 2957	9'3
	211					271					331					391			
11	+54°360	+26°973			12	-41°334	-41°283	65 2907	9'4	38	-4°932	-55°212	65 2931	8'0	16	+26°386	-4°740	64 3078	9'4
11	+54°652	+61°410			15	-41°166	-41°346			16	-4°448	-18°356	65 2932	9'3	9	+27°504	-13°067		
18	+55°215	+5°303	64 3096	9'2	9	-41°073	-42°803			10	-4°148	-11°152			13	+27°793	-57°276		
12	+55°766	+56°321	63 3511	10'0	9	-41°060	-34°114			14	-3°933	-62°841	65 2933	10'0	19	+28°105	-10°711	65 2958	9'4
9	+56°675	+6°864			11	-40°279	-6°762			13	-2°659	-10°245	65 2934	9'4	22	+29°218	-3°787	64 3079	9'0
18	+57°229	+33°776	64 3098	9'2	13	-39°234	-51°257			14	-2°187	-53°313			17	+29°495	-42°115	65 2960	9'6
12	+57°415	+42°060	64 3097	10'0	13	-37°760	-48°159	65 2908	10'0	12	-2°040	-61°189			11	+29°731	-9°243	65 2959	9'3
21	+57°931	+13°997	64 3099	9'2	13	-36°715	-16°420	65 2909	9'6	14	-1°965	-50°999	65 2935	10'0	13	+29°866	-1°642		
12	+59°051	+27°735			10	-36°125	-64°373			32	-0°902	-44°847	65 2936	9'0	12	+30°075	-19°782		
9	+59°074	+50°609			17	-35°795	-9°837	65 2910	9'3	10	-0°621	-64°341			10	+30°402	-19°054		
	221					281					341					401			
36	+59°174	+44°389	64 3100	8'4	11	-35°694	-50°621			9	+0°241	-34°838			14	+30°465	-60°268	65 2962	9'4
9	+60°985	+37°841			12	-35°229	-35°307	65 2911	10'0	21	+2°035	-15°403	65 2937	9'0	22	+30°480	-19°460	65 2961	8'7
12	+61°085	+13°184			10	-34°660	-42°384			24	+3°700	-35°404	65 2938	8'9	12	+30°722	-20°298		
9	+61°096	+9°201			15	-34°510	-27°781	65 2912	9'8	13	+4°291	-20°754	65 2939	10'0	10	+31°669	-18°148		
10	+61°537	+36°339			10	-33°948	-47°525			22	+5°056	-5°144	64 3060	8'9	10	+31°675	-48°266		
14	+62°313	+13°512	64 3101	10'0	20	-32°790	-57°586	65 2913	9'2	20	+6°174	-60°403	65 2940	9'3	12	+31°866	-25°862		
11	+63°664	+3°191			9	-32°607	-19°334			12	+6°466	-10°065	65 2941	9'9	21	+32°763	-47°174	65 2963	8'8
11	+64°499	+6°073			46	-32°510	-61°244	65 2914	7'9	10	+6°519	-34°524			11	+33°475	-12°641		
14	-64°619	-21°817	65 2886	9'4	9	-32°221	-42°104			9	+6°710	-46°789			12	+33°595	-56°837	65 2964	9'8
10	-63°827	-23°624			10	-31°690	-38°956			11	+6°833	-32°186			13	+33°893	-13°761		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.									
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.						
	411,					471,					PLATE CENTRE.											
9	+34.543	-42.308			10	+58.567	-60.731				15 ^h 9 ^m , - 85°.											
26	+35.105	-52.075	65	2965	8.6	12	+58.687	-14.045			Plate 966. 1894, May 28.											
13	+35.532	-9.070			12	+59.151	-44.127				PROVISIONAL CONSTANTS.											
14	+35.700	-52.053	65	2966	10.0	16	+59.270	-29.159	65	2985	9.4											
10	+35.731	-45.311			24	+60.439	-11.724	65	2987	8.6												
											a = - .01154	d = - .00025										
11	+36.411	-50.117			10	+61.442	-45.678				b = + .00027	e = - .01161										
35	+36.978	-29.433	65	2967	8.3	12	+62.048	-58.034	65	2989	9.8	c = + .0123	f = - .0749									
9	+38.128	-12.778	65	2968	9.6	9	+62.068	-40.774			To obtain standard co-ordinates, ξ, η											
10	+38.161	-42.542			15	+62.974	-37.596	65	2990	10.0	$\xi = x + ax + by + c$											
10	+38.203	-7.846			13	+63.228	-32.930	65	2992	10.0	$\eta = y + dx + ey + f$											
	421					481																
14	+38.258	-11.960			11	+64.476	-46.380			10	-64.948	+7.314										
13	+38.292	-50.091			20	+64.666	-1.777	64	3103	9.2	10	-63.726	+55.994	63	3511	10.0						
9	+38.613	-43.351			10	+64.897	-21.151			9	-63.722	+11.026										
12	+38.777	-6.622								9	-63.454	+56.516										
16	+38.927	-40.812	65	2969	9.6					10	-63.046	+26.640										
16	+39.243	-44.029	65	2970	9.6					38	-61.954	+5.684	64	3095	7.9							
11	+39.712	-47.706								11	-61.042	+41.900	64	3097	10.0							
13	+39.885	-59.374								12	-60.648	+33.632	64	3098	9.2							
19	+41.999	-28.673	65	2971	9.3					18	-60.622	+5.081	64	3096	9.2							
29	+42.225	-0.344	64	3090	8.2					9	-60.350	+52.476										
	431										11	-58.419	+27.730									
9	+42.629	-50.355								22	-59.477	+44.858	64	3100	8.4							
16	+42.651	-7.686	65	2972	9.6					9	-59.289	+6.740										
15	+43.293	-62.077	65	2973	9.6					9	-58.622	+1.187										
11	+43.484	-64.047								20	-58.552	+13.941	64	3099	9.2							
9	+44.307	-43.058								11	-58.419	+27.730										
12	+44.521	-17.522								9	-58.294	+42.092										
11	+44.611	-13.524								10	-57.191	+37.938										
19	+45.501	-36.382	65	2974	9.2					11	-56.540	+36.489										
12	+45.561	-27.220								10	-55.332	+13.369										
10	+45.823	-39.356								9	-55.055	+9.399										
	441										21											
11	+46.544	-11.166								12	-54.155	+13.787	64	3101	10.0							
9	+47.340	-21.092								9	-53.946	+27.418										
14	+47.723	-36.799	65	2976	9.9					18	-52.859	+41.400	64	3102	8.8							
9	+47.785	-41.979								9	-52.294	+48.280										
13	+47.952	-42.869								11	-52.061	+3.577										
9	+47.976	-45.504								9	-51.464	+44.531										
12	+48.221	-42.991								10	-51.437	+6.512										
13	+48.340	-36.550	65	2977	10.0					9	-50.862	+47.310										
14	+48.407	-7.677								9	-50.151	+38.100										
11	+48.644	-47.058								12	-49.821	+20.023	64	3104	9.9							
	451										31											
16	+49.454	-14.437	65	2978	9.6					9	-49.607	+3.672										
12	+50.031	-9.091								11	-49.041	+8.820										
10	+50.250	-11.766								12	-48.888	+59.469	63	3519	9.6							
12	+50.315	-20.606								9	-48.630	+35.498										
10	+50.502	-20.684								11	-48.370	+8.245										
11	+50.820	-39.100								11	-48.126	+31.953										
19	+52.529	-16.758	65	2979	9.4					9	-48.096	+62.063										
11	+52.544	-35.812								9	-47.966	+48.812										
11	+52.914	-9.801								11	-47.360	+61.948										
14	+53.902	-8.395	65	2980	9.7					9	-46.962	+10.627										
	461										41											
19	+53.936	-10.253	65	2981	9.4					13	-46.571	+27.132	64	3105	9.6							
12	+53.973	-29.804								9	-45.320	+17.432										
13	+54.124	-9.438								9	-44.950	+30.204										
9	+54.171	-36.749								11	-44.943	+39.739										
13	+55.512	-38.538								11	-43.818	+21.926	64	3106	10.0							
13	+56.270	-34.859	65	2983	10.0					16	-43.267	+44.880	64	3107	9.3	9	-14.460	+26.097				
11	+56.510	-34.645										11				-43.184	+44.900	9	-13.722	+45.494		
11	+56.568	-51.400										20				-42.886	+58.312	63	3522	8.8	9	-13.300	+51.468
15	+57.533	-50.186	65	2984	9.4					11	-42.506	+42.398	64	3109	10.0	9	-13.133	+35.617				
10	+57.738	-32.197								19	-42.300	+16.460	64	3108	9.0	12	-12.887	+23.783	64	3129	9.7	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
II	-12°675	+60°464			II	+11°432	+46°845			9	+32°013	+60°145			15	+52°607	+21°204	64 3169	9°4
12	-11°825	+3°506	64 3130	9°9	10	+11°615	+4°182			10	+32°121	+38°230			10	+52°634	+37°632		
20	-11°756	+57°985	63 3541	8°5	12	+11°870	+4°913	64 3139	9°9	9	+33°126	+25°613			11	+53°352	+29°103	64 3171	9°9
II	-11°567	+62°443			9	+12°741	+40°580			9	+33°333	+11°903			12	+53°561	+51°989	64 3170	9°5
9	-11°369	+22°519			9	+14°264	+51°335			15	+33°368	+6°431	64 3153	9°5	12	+53°628	+20°677		
II	-10°858	+63°475			17	+15°994	+17°627	64 3140	9°2	9	+33°385	+32°805			15	+53°774	+12°910	64 3172	9°4
9	-10°771	+50°819			9	+16°427	+58°543			9	+33°431	+44°872			11	+53°862	+57°694		
II	-10°083	+61°966			II	+16°529	+15°093			II	+34°038	+2°041			9	+54°622	+0°950		
9	-10°006	+36°214			9	+16°640	+60°490			10	+34°070	+13°355			12	+55°028	+63°467	63 3584	9°4
12	-9°942	+27°930	64 3132	9°8	9	+16°720	+50°491			II	+34°265	+12°269			9	+55°231	+14°033		
	121					181					241					301			
14	-9°921	+7°866	64 3131	9°4	9	+16°900	+60°892			10	+34°853	+60°747			10	+55°904	+61°135		
II	-9°465	+63°841			9	+17°308	+13°145			12	+34°920	+39°784	64 3154	9°9	9	+56°343	+13°783		
9	-9°360	+25°800			12	+17°469	+33°693	64 3141	9°7	14	+35°126	+40°667	64 3155	9°2	9	+58°348	+26°687		
9	-9°345	+47°130			9	+17°615	+3°747			9	+35°142	+50°965			9	+58°520	+60°465		
9	-8°956	+29°118			9	+18°017	+43°919			9	+35°557	+36°150			12	+58°568	+37°707	64 3175	9°9
9	-8°941	+41°608			16	+18°046	+53°049	64 3142	9°2	9	+35°701	+63°170			10	+59°009	+53°606		
II	-8°882	+15°072	64 3133	9°9	10	+18°109	+44°726			II	+36°052	+3°101			14	+59°139	+26°379	64 3176	9°2
9	-8°772	+40°416			9	+18°123	+42°201			9	+36°628	+0°690			9	+59°865	+51°958		
II	-8°768	+52°054			10	+18°513	+64°480			13	+36°781	+42°386	64 3156	9°7	10	+60°796	+29°740		
II	-7°600	+26°104			10	+18°513	+44°265			9	+37°158	+25°957			9	+61°362	+45°323		
	131					191					251					311			
9	-7°132	+27°085			24	+19°628	+54°861	64 3143	8°6	15	+37°184	+19°928	64 3157	9°5	9	+61°747	+0°784		
9	-6°961	+30°688			9	+19°760	+29°942			10	+37°564	+6°842			9	+61°980	+45°914		
II	-6°083	+44°182			9	+20°105	+12°640			9	+37°746	+42°000			9	+62°273	+51°768		
9	-5°576	+25°918			13	+20°331	+30°023	64 3144	9°8	13	+38°061	+5°379	64 3158	9°5	20	+62°728	+61°008	63 3591	8°4
12	-5°245	+23°795	64 3134	9°9	II	+20°731	+4°276			20	+38°232	+0°626	64 3159	9°2	13	+62°997	+12°893		
20	-5°026	+42°916	64 3135	8°6	II	+21°230	+51°296			II	+39°249	+7°086			II	+63°272	+11°166		
9	-4°717	+59°206			II	+21°568	+26°574			II	+39°922	+46°427			12	+63°308	+61°794	63 3593	9°4
II	-4°653	+9°544			II	+21°668	+8°312			9	+40°405	+17°054			9	+63°742	+32°043		
10	-4°277	+28°256			9	+22°026	+32°035			15	+40°551	+20°221	64 3160	9°4	11	+63°837	+26°180	64 3177	10°0
II	-4°038	+13°287			10	+22°110	+23°575			12	+40°980	+34°259	64 3161	9°9	12	+64°291	+26°442	64 3179	9°8
	141					201					261					321			
9	-3°918	+21°147			15	+22°210	+19°125	64 3145	9°2	12	+41°317	+58°238			34	+64°985	+48°684	64 3178	8°0
9	-3°425	+59°141			II	+22°220	+35°150			9	+41°453	+16°399			II	-64°995	-15°007	65 2978	9°6
II	-3°395	+29°931			9	+22°291	+8°860			II	+41°899	+56°633			9	-64°774	-9°639		
13	-2°911	+41°508	64 3136	9°4	II	+23°063	+17°938			12	+42°441	+37°456	64 3162	9°9	II	-64°544	-37°154	65 2977	10°0
9	-1°910	+8°160			9	+23°354	+26°797			9	+42°449	+45°902			II	-64°465	-43°470		
9	-0°973	+8°476			18	+23°454	+29°682	64 3146	9°1	10	+43°058	+44°945			9	-64°381	-12°291		
9	-0°639	+43°662			II	+23°559	+2°351			9	+43°509	+27°960			10	-64°205	-43°584		
9	-0°152	+47°123			9	+23°932	+5°586			16	+43°547	+51°102	64 3163	9°2	10	-63°683	-21°098		
II	-0°108	+26°473			10	+25°916	+0°382			9	+44°310	+36°610			10	-63°495	-47°601		
II	+0°042	+47°979			II	+26°014	+45°642			9	+44°363	+18°018			9	-63°493	-21°152		
	151					211					271					331			
9	+0°087	+31°945			10	+26°431	+43°245			II	+45°708	+20°801			9	-61°869	-10°141		
9	+0°918	+30°095			16	+27°304	+55°902	63 3559	9°2	9	+45°917	+34°944			9	-61°864	-39°520		
9	+2°376	+37°163			9	+27°622	+30°340			II	+46°518	+10°902			15	-61°748	-17°104	65 2979	9°4
9	+2°766	+44°719			10	+27°943	+10°566			10	+46°783	+31°190			12	-60°978	-8°669	65 2980	9°7
9	+3°084	+52°111			9	+28°087	+43°363			II	+47°187	+17°142			16	-60°815	-10°523	65 2981	9°4
9	+3°704	+51°426			13	+28°714	+64°579	63 3560	9°9	II	+47°338	+39°817			12	-60°682	-9°697		
II	+3°853	+50°617			14	+28°832	+46°508	64 3147	9°4	9	+48°005	+28°295			9	-60°378	-36°104		
9	+4°069	+43°885			15	+28°931	+58°261	63 3561	9°2	12	+48°118	+48°650	64 3165	10°0	9	-59°856	-6°371		
13	+5°331	+14°511	64 3137	9°5	20	+29°076	+52°658	64 3148	9°2	18	+48°676	+2°037	64 3166	9°4	10	-59°405	-30°008		
9	+5°381	+47°985			28	+29°492	+51°692	64 3149	8°6	9	+48°683	+30°333			9	-58°691	-36°929		
	161					221					281					341			
10	+5°514	+19°041			12	+29°915	+21°842	64 3150	9°9	26	+48°994	+0°558	64 3167	8°9	10	-57°245	-38°620		
9	+6°547	+33°033			9	+30°319	+13°617			9	+49°093	+53°366			12	-56°737	-34°888		
13	+6°897	+55°123	63 3550	9°7	24	+30°497	+60°368	63 3563	8°4	9	+50°112	+1°110			10	-56°515	-34°656	65 2983	10°0
10	+7°988	+39°459			II	+30°751	+58°530			9	+50°614	+15°504			10	-55°814	-13°966		
II	+8°657	+30°725			9	+30°881	+55°032			10	+50°938	+46°206			9	-55°465	-32°127		
16	+8°869	+44°171	64 3138	9°2	II	+31°399	+22°667			9	+51°047	+26°620			10	-55°276	-51°363		
9	+9°047	+55°231			9	+31°656	+32°133			12	+51°170	+41°869	64 3168	9°9	9	-54°493	-25°181		
12	+10°100	+10°271			9	+31°717	+56°703			10	+51°484	+42°859			13	-54°421	-50°078	65 2984	9°4
10	+11°163	+42°361			10	+31°753	+22°643			9	+51°544	+2°200			25	-54°218	-11°525	65 2987	8°6
9	+11°391	+41°761			18	+31°983	+33°805	64 3152	9°2	9	+51°832	+29°525			14	-54°164	-28°996	65 2985	9°4

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
10	-53°217	-43°937			9	-20°847	-15°404			11	+3°688	-24°413			22	+27°901	-43°922	65 3037	9°2
10	-52°641	-60°517			9	-20°172	-26°068			9	+3°962	-48°192			40	+28°663	-51°728	65 3038	7°7
18	-50°710	-1°314	64 3103	9°2	9	-18°327	-37°167			36	+4°175	-14°130	65 3025	8°4	15	+28°776	-46°951	65 3039	9°9
14	-49°952	-32°480	65 2992	10°0	19	-18°318	-51°511	65 3006	9°2	10	+5°015	-53°397			11	+29°790	-64°319		
13	-49°865	-37°141	65 2990	10°0	9	-18°016	-53°073			9	+5°513	-35°057			20	+30°033	-4°267	64 3151	9°2
11	-49°370	-57°600	65 2989	9°8	28	-17°888	-47°446	65 3007	8°2	9	+5°615	-8°550			11	+30°256	-8°479		
28	-49°283	-8°110	65 2993	8°6	9	-17°665	-2°992			11	+5°721	-32°307			11	+30°994	-20°380		
9	-49°126	-20°617			9	-17°458	-19°437			9	+5°722	-52°233			9	+31°504	-27°317		
12	-47°756	-45°797			11	-16°401	-60°997			16	+5°904	-39°749	65 3026	9°5	9	+31°541	-55°664		
9	-46°438	-64°443			22	-15°638	-39°415	65 3008	9°1	9	+5°972	-59°372			9	+31°660	-38°533		
	361					421					481					541			
12	-45°804	-57°634	65 2994	9°6	9	-14°618	-37°752			9	+6°037	-58°303			11	+31°754	-30°439		
9	-45°703	-9°716			9	-14°241	-63°993			9	+6°743	-22°919			9	+32°214	-34°702		
9	-45°568	-13°455			9	-14°030	-42°610			11	+6°786	-53°839			12	+32°725	-38°345	65 3040	9°9
9	-44°906	-2°903			9	-13°558	-42°975			9	+7°490	-45°175			12	+32°993	-47°002		
9	-43°492	-38°058			11	-13°452	-53°372			13	+7°608	-59°681	65 3027	9°9	9	+33°309	-48°414		
10	-42°359	-21°174			11	-12°573	-46°186			9	+7°630	-46°605			11	+33°327	-5°970		
9	-42°275	-12°847			9	-12°516	-11°807			9	+8°661	-32°936			9	+33°429	-37°145		
16	-42°226	-49°306	65 2995	9°2	11	-12°283	-61°236			13	+9°237	-45°076	65 3028	10°0	11	+33°652	-20°354		
9	-39°188	-33°156			9	-12°217	-10°497			9	+9°569	-51°381			10	+33°755	-55°156		
17	-38°922	-52°592	65 2996	9°2	13	-11°630	-13°698	65 3009	9°5	9	+9°603	-11°800			9	+33°846	-22°528		
	371					431					491					551			
9	-38°584	-41°357			11	-10°444	-21°502			10	+9°631	-33°915			9	+34°028	-31°153		
9	-38°369	-9°976			9	-10°148	-12°803			13	+10°092	-50°386	65 3029	9°8	9	+35°273	-48°205		
9	-38°116	-29°846			11	-8°751	-46°945			9	+10°201	-55°816			13	+35°419	-53°563	65 3041	9°2
11	-38°008	-49°775			13	-8°378	-38°727	65 3010	9°9	9	+10°733	-57°507			9	+35°657	-47°847		
10	-37°665	-47°316			9	-8°230	-52°565			9	+11°046	-42°808			11	+36°154	-39°791		
12	-37°347	-13°583	65 2997	9°9	9	-8°144	-41°050			9	+11°288	-33°344			13	+36°178	-30°798		
9	-37°294	-4°766			11	-7°685	-19°945			10	+11°921	-46°709			13	+36°836	-30°327		
9	-36°365	-7°659			9	-7°659	-46°038			12	+11°960	-57°002	65 3030	9°9	9	+36°883	-42°217		
11	-35°614	-40°729			14	-7°654	-54°925	65 3011	9°8	9	+12°682	-35°656			9	+36°890	-35°314		
9	-31°908	-55°944			9	-7°082	-38°521			12	+13°125	-33°832			9	+37°146	-35°857		
	381					441					501					561			
10	-31°806	-44°698			11	-6°790	-52°221			11	+14°078	-8°456			9	+37°221	-37°404		
14	-31°062	-49°928	65 2998	9°8	11	-5°241	-37°495			10	+14°461	-1°539			9	+37°516	-36°453		
9	-30°937	-1°640			9	-5°151	-47°268			9	+15°891	-27°264			10	+37°837	-29°114		
9	-29°966	-0°941			9	-5°144	-41°718			9	+16°183	-25°797			9	+38°343	-40°444		
16	-29°404	-15°138	65 2999	9°4	11	-4°697	-22°192			10	+17°739	-45°183			18	+38°613	-64°247	65 3043	8°8
18	-28°707	-20°092	65 3002	9°2	12	-4°615	-63°807	65 3012	9°4	9	+18°452	-3°848			12	+38°908	-60°798	65 3044	9°7
28	-28°555	-36°039	65 3001	8°3	9	-4°552	-31°687			12	+18°829	-33°507	65 3031	9°9	10	+39°604	-56°853		
9	-28°237	-45°545			9	-4°028	-32°903			9	+19°082	-33°195			10	+39°694	-31°858		
12	-28°166	-58°960	65 3000	10°0	47	-3°811	-43°702	65 3013	7°0	9	+19°107	-32°213			9	+39°870	-16°401		
11	-27°496	-43°296			15	-3°431	-37°919	65 3014	9°6	17	+19°208	-57°098	65 3032	9°2	12	+40°378	-49°172		
	391					451					511					571			
12	-26°975	-30°647			10	-2°892	-49°037			11	+19°691	-64°877			9	+40°380	-37°359		
10	-26°971	-64°493			11	-0°993	-12°661			12	+20°450	-30°607	65 3033	10°0	17	+40°462	-39°879	65 3045	9°5
9	-26°956	-62°009			11	-0°627	-44°395			9	+20°608	-60°644			11	+40°804	-36°114		
13	-26°948	-58°720	65 3003	9°9	9	-0°358	-51°673			9	+21°024	-38°705			9	+41°078	-23°806		
10	-26°947	-47°173			16	-0°220	-24°060	65 3016	9°7	9	+21°277	-53°436			16	+41°131	-16°596	65 3046	9°5
13	-26°719	-41°470	65 3004	10°0	16	-0°194	-32°259	65 3015	9°5	9	+21°393	-47°066			10	+41°327	-11°858		
9	-26°387	-21°608			17	-0°068	-24°558	65 3017	9°4	9	+22°282	-49°003			17	+42°064	-12°794	65 3047	9°6
11	-25°967	-47°907			9	+0°123	-28°338			9	+22°807	-18°652			10	+42°160	-0°556		
11	-24°759	-55°127			14	+1°155	-32°292	65 3018	9°8	11	+23°110	-62°991			9	+42°932	-49°770		
9	-23°977	-52°458			9	+1°732	-8°832	65 3019	9°9	9	+23°115	-14°685			26	+43°073	-31°742	65 3048	8°6
	401					461					521					581			
10	-23°445	-16°310			9	+1°906	-41°570			12	+23°763	-20°978	65 3034	10°0	14	+43°340	-31°736	65 3049	9°4
10	-23°294	-21°892			11	+1°969	-46°239			9	+23°927	-45°949			12	+43°388	-2°597	64 3164	9°8
12	-23°189	-51°491	65 3005	10°0	9	+2°159	-18°698			9	+24°468	-41°408			11	+43°536	-53°435		
9	-22°857	-27°710			11	+2°295	-34°869			9	+25°276	-60°584			10	+43°702	-4°854		
9	-22°291	-42°276			13	+2°556	-52°028	65 3021	10°0	9	+25°538	-5°501			9	+43°716	-31°452		
10	-22°072	-59°462			9	+2°574	-56°643			11	+25°977	-47°526			9	+44°031	-19°818		
10	-21°981	-54°630			13	+3°012	-54°374	65 3022	9°9	9	+26°745	-63°877			11	+44°200	-41°428		
11	-21°921	-9°316			16	+3°222	-60°828	65 3023	9°2	9	+27°542	-28°244			10	+44°332	-48°700		
9	-21°871	-59°403			12	+3°348	-53°978	65 3024	9°9	11	+27°609	-14°541			11	+44°932	-39°453		
9	-21°841	-31°066			9	+3°373	-29°783			15	+27°775	-10°021	65 3036	9°7	11	+45°174	-27°121		

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
9	-37.736	+36.066			9	-17.029	+57.753			15	+1.467	+24.910	64 3212	10.0	9	+17.264	+47.696		
9	-37.196	+37.799			9	-16.774	+7.348			9	+1.767	+55.571			9	+17.448	+14.310		
11	-37.189	+29.028			9	-10.417	+47.841			52	+1.988	+13.562	64 3213	7.0	9	+17.498	+14.819		
10	-36.871	+59.181			9	-16.221	+49.177			12	+2.177	+41.287			16	+18.171	+44.926	64 3226	9.7
9	-36.829	+48.291			9	-16.042	+44.103			12	+2.221	+49.817			16	+18.676	+5.745	64 3227	9.8
17	-36.805	+27.266	64 3194	9.4	9	-15.514	+44.399			9	+2.590	+11.814			9	+18.678	+55.328		
9	-36.493	+55.578			11	-15.362	+6.072			15	+4.638	+4.813	64 3214	10.0	9	+19.541	+36.532		
16	-36.391	+27.620	64 3195	10.0	11	-15.176	+63.170			10	+4.686	+49.865			9	+19.791	+27.814		
20	-36.329	+48.240	64 3196	9.2	9	-14.884	+30.443			19	+4.877	+33.143	64 3215	9.1	9	+21.235	+24.002		
9	-36.261	+28.881			9	-14.570	+56.023			15	+4.941	+1.327	64 3216	9.6	15	+21.314	+9.394		
	121					181					241					301			
9	-35.421	+2.946			9	-14.435	+62.692			9	+5.093	+38.091			12	+21.512	+59.830		
18	-34.596	+29.270	64 3197	9.9	9	-14.346	+7.253			9	+5.241	+19.751			9	+21.890	+48.757		
9	-34.137	+52.723			9	-14.024	+33.102			15	+5.425	+56.564			15	+22.362	+28.147		
9	-34.112	+26.840			9	-13.635	+29.864			9	+5.618	+17.883			9	+22.562	+25.264		
16	-33.778	+43.045	64 3198	10.0	9	-13.543	+7.652			9	+6.125	+18.697			9	+22.628	+25.410		
9	-33.113	+54.922			9	-13.505	+50.692			9	+6.292	+24.014			18	+22.687	+12.870	64 3229	9.2
9	-32.098	+62.448			9	-13.329	+20.281			15	+6.292	+6.323	64 3217	10.0	18	+22.791	+51.623	64 3228	9.5
9	-32.093	+17.720			12	-12.486	+51.233			10	+6.312	+46.016			9	+23.009	+33.319		
9	-31.898	+5.118			12	-12.197	+5.489			9	+6.314	+30.819			16	+23.219	+44.581		
9	-31.210	+3.972			9	-11.773	+45.106			11	+6.395	+43.457			9	+23.265	+30.129		
	131					191					251					311			
9	-31.075	+31.847			20	-11.327	+58.213	63 3617	8.9	9	+7.034	+22.994			9	+23.296	+48.656		
9	-30.518	+28.148			18	-10.610	+50.303	64 3203	9.8	17	+7.243	+26.592	64 3218	9.9	16	+23.376	+3.598	64 3230	9.8
9	-29.890	+55.776			9	-10.060	+32.074			12	+7.773	+10.609			9	+23.725	+11.334		
9	-29.863	+1.762			20	-9.455	+56.078	63 3619	9.1	9	+8.229	+17.092			9	+24.196	+7.774		
14	-29.151	+21.648			11	-9.419	+56.843			11	+8.416	+59.255			17	+24.631	+32.093	64 3231	9.8
10	-29.149	+47.055			9	-8.917	+37.751			9	+8.438	+54.507			12	+25.307	+22.826		
9	-28.534	+16.976			9	-8.871	+62.509			9	+8.451	+39.646			9	+25.544	+5.369		
9	-27.852	+10.053			9	-8.558	+12.466			11	+8.639	+1.241			10	+25.571	+57.731		
9	-27.575	+9.774			9	-8.557	+16.122			11	+8.706	+58.853			16	+25.892	+58.297	63 3632	9.8
17	-27.572	+34.195	64 3199	9.9	40	-8.464	+14.392	64 3205	8.4	9	+8.712	+3.739			9	+26.054	+25.771		
	141					201					261					321			
9	-27.182	+19.118			11	-8.416	+3.633			10	+8.738	+32.223			9	+26.158	+50.510		
10	-26.446	+35.368			9	-8.378	+25.714			9	+8.889	+58.281			9	+26.463	+21.548		
12	-26.427	+36.760			9	-8.376	+29.517			9	+8.959	+59.333			9	+26.768	+54.411		
9	-26.411	+32.633			16	-7.672	+5.230	64 3206	9.9	9	+9.125	+37.550			16	+27.068	+14.892	64 3233	10.0
9	-26.363	+26.204			9	-7.391	+40.550			42	+9.487	+47.417	64 3219	8.1	17	+27.154	+32.149	64 3232	10.0
9	-26.291	+36.404			9	-6.778	+51.277			24	+9.783	+48.741	64 3220	9.0	10	+27.428	+52.590		
10	-26.061	+5.627			9	-6.656	+8.738			9	+9.828	+51.891			9	+27.503	+12.287		
11	-25.276	+47.649			9	-6.549	+28.957			9	+9.899	+57.883			9	+28.594	+8.068		
9	-25.026	+48.743			9	-5.870	+5.641			34	+10.918	+8.879	64 3221	8.6	32	+29.142	+7.533	64 3236	8.4
9	-24.796	+40.499			9	-4.068	+41.191			10	+10.950	+17.537			9	+29.265	+16.414		
	151					211					271					331			
11	-24.780	+1.629	64 3200	10.0	15	-4.049	+38.323			9	+11.895	+23.165			9	+29.376	+51.546		
9	-24.676	+3.302			9	-3.781	+9.015			9	+12.496	+7.920			18	+29.652	+27.372	64 3237	9.7
9	-24.643	+18.833			9	-3.680	+52.641			10	+12.506	+9.771			9	+29.758	+19.572		
9	-24.036	+54.110			9	-3.605	+61.929			17	+12.588	+55.173	64 3223	9.4	10	+30.040	+49.132		
9	-23.750	+43.136			12	-2.517	+35.784			9	+13.038	+8.443			9	+30.043	+0.865		
10	-23.705	+62.445			20	-2.408	+49.975	64 3207	9.1	9	+13.118	+36.853			9	+30.159	+11.970		
9	-23.020	+1.761			24	-1.958	+28.568	64 3208	8.9	11	+13.308	+51.091			9	+30.161	+24.425		
10	-21.060	+41.889			9	-1.447	+49.008			9	+13.333	+44.821			9	+30.478	+20.160		
9	-20.938	+15.592			9	-1.058	+26.688			17	+13.465	+46.133	64 3224	9.9	9	+30.530	+39.442		
10	-20.932	+48.284			9	-0.708	+48.091			9	+13.558	+15.735			9	+30.596	+39.227		
	161					221					281					341			
9	-20.863	+9.006			9	-0.529	+14.084			9	+13.831	+18.471			17	+30.981	+57.136	63 3635	9.5
9	-20.589	+32.699			9	-0.416	+18.560			18	+13.921	+41.172	64 3225	9.6	9	+31.179	+61.210		
9	-20.464	+14.393			10	-0.348	+47.240			9	+13.998	+25.582			18	+31.486	+2.681	64 3238	9.2
9	-20.419	+16.613			9	+0.238	+6.014			9	+15.376	+33.679			9	+31.545	+10.393		
9	-20.177	+53.196			15	+0.745	+38.312	64 3209	10.0	9	+15.387	+17.821			11	+31.683	+35.660		
14	-20.165	+61.286			9	+0.913	+49.017			9	+15.437	+2.436			9	+31.721	+32.217		
9	-18.447	+10.142			9	+1.017	+15.283			9	+15.489	+22.000			9	+31.997	+45.083		
11	-17.809	+16.782			16	+1.049	+49.375	64 3211	9.8	10	+15.788	+56.995			9	+32.082	+28.707		
22	-17.568	+41.891	64 3201	8.9	16	+1.162	+7.715	64 3210	9.9	9	+16.402	+56.649			9	+32.099	+9.511		
9	-17.308	+15.745			9	+1.208	+13.190			9	+17.224	+53.629			9	+32.690	+28.919		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
9	+32°714	+ 2°523			9	+49°713	+58°721			9	-60°879	-63°927			18	-41°566	-63°415	65 3067	9.2
20	+32°797	+25°709	64 3239	9.2	9	+50°035	+12°328			16	-60°673	-20°634	65 3056	10.0	10	-41°533	-39°931		
9	+34°048	+11°207			19	+50°346	+37°716	64 3249		9	-60°560	-55°496			9	-40°797	-52°517		
20	+34°261	+ 3°059	64 3241	9.2	18	+50°452	+26°803	64 3250	10.0	16	-60°182	-59°411	65 3054	9.2	9	-40°250	-44°156		
9	+34°410	+16°747			9	+50°510	+10°184			9	-60°093	-63°532			9	-39°220	-19°450		
12	+34°879	+41°292			9	+51°135	+21°762			11	-59°647	-11°839			9	-38°888	- 3°682		
20	+35°029	+48°687	64 3240	8.9	9	+51°092	+17°980			12	-58°762	-14°553			15	-38°691	-19°772	65 3070	9.9
12	+35°053	+36°368			9	+51°779	+15°029			9	-58°755	-22°636			9	-38°416	-29°080		
9	+35°338	+33°111			9	+51°914	+10°834			9	-58°213	-37°609			11	-38°255	-18°130		
9	+35°355	+62°195			9	+52°540	+ 4°902			13	-58°040	- 6°801			9	-37°293	-16°280		
	361					421					481					541			
48	+35°400	+15°346	64 3243	7.4	9	+52°752	+58°328			13	-57°124	-33°710			12	-37°125	-20°080		
27	+35°543	+35°119	64 3242	8.6	9	+52°906	+ 0°751			20	-56°945	-37°714	65 3057	8.8	11	-37°009	-49°941		
9	+36°125	+44°948			9	+53°071	+51°215			9	-56°426	-24°269			9	-36°875	-52°605		
9	+36°177	+57°100			9	+53°668	+49°230			9	-56°299	- 4°726			9	-36°590	-44°389		
9	+36°233	+26°731			9	+53°799	+35°750			9	-56°064	-51°611			9	-36°205	- 7°894		
9	+36°644	+15°900			12	+54°018	+58°589			11	-55°221	-21°271			9	-36°148	-41°041		
9	+37°272	+ 1°489			12	+54°082	+57°633			12	-55°171	-22°338			12	-35°882	- 2°059		
17	+37°297	+55°953	63 3638	9.6	9	+54°738	+ 0°751			10	-54°861	-55°915			11	-35°806	- 7°669		
9	+37°483	+39°046			9	+55°282	+57°552			11	-54°624	-43°855			19	-35°540	- 9°555	65 3071	9.0
9	+37°702	+22°712			12	+55°535	+34°541	64 3252	10.0	17	-54°512	-36°337	65 3058	9.7	9	-35°417	-34°864		
	371					431					491					551			
9	+38°137	+11°041			9	+55°632	+24°682			13	-54°198	-31°694			12	-35°250	-38°417		
9	+38°168	+ 1°068			9	+55°656	+37°642			11	-53°907	-46°448			11	-35°149	-21°660		
9	+38°403	+17°852			9	+55°751	+50°189			9	-53°819	- 5°169			9	-34°798	-63°842		
10	+38°641	+16°402			17	+56°059	+ 9°151	64 3254	9.9	20	-53°688	- 9°441	65 3060	8.8	9	-34°102	-52°383		
9	+38°700	+16°494			9	+56°120	+41°441			50	-53°020	-47°456	65 3059	6.9	13	-34°085	-29°166		
9	+38°995	+11°894			10	+56°144	+56°155			10	-53°012	- 0°922			9	-33°501	-33°190		
20	+39°160	+53°999	64 3244	9.2	9	+56°770	+ 3°033			10	-52°976	-52°043			11	-33°499	-38°609		
9	+39°196	+28°094			11	+57°098	+41°160			17	-51°830	-34°043	65 3061	9.9	13	-33°351	-23°458		
15	+39°577	+36°752			9	+57°362	+56°245			11	-51°767	- 7°535			22	-33°336	-63°536	65 3072	8.6
9	+39°651	+ 6°698			18	+57°433	+53°347	64 3253	9.5	10	-51°659	-11°729			19	-33°298	-47°695	65 3073	9.4
	381					441					501					561			
9	+39°753	+13°310			15	+57°891	+17°195			10	-51°583	-14°581			12	-33°083	- 2°976		
9	+39°755	+43°084			9	+58°280	+44°811			18	-51°503	-11°608	65 3063	9.4	10	-32°990	-13°048		
9	+40°645	+53°276			9	+58°353	+17°601			11	-51°056	-43°153			32	-32°296	-15°608	65 3074	8.2
10	+41°011	+45°829			9	+58°442	+16°457			13	-50°954	- 1°631			11	-32°101	-35°461		
36	+41°015	+61°759	63 3642	7.9	9	+58°948	+44°787			9	-50°480	-34°846			9	-31°815	-38°517		
20	+41°729	+54°437	64 3245	8.9	9	+58°982	+48°403			10	-50°427	-56°887			9	-31°057	-31°102		
9	+41°900	+23°839			18	+59°525	+44°918	64 3256	9.5	10	-50°410	-40°711			15	-30°520	-45°262	65 3075	9.8
9	+42°272	+38°292			9	+60°247	+29°472			10	-49°626	- 5°361			9	-30°459	-21°877		
18	+42°713	+55°976	63 3644	9.0	9	+60°524	+43°314			10	-49°276	-36°046			36	-29°685	-12°072	65 3077	7.6
20	+43°243	+19°711	64 3246	9.2	9	+61°711	+23°119			10	-48°408	-33°347			50	-29°466	-36°489	65 3076	7.0
	391					451					511					571			
9	+43°381	+ 0°351			9	+61°971	+ 7°685			11	-47°116	-24°147			10	-29°104	-45°779		
10	+43°452	+ 8°558			12	+62°530	+40°760			11	-46°283	-17°909			10	-29°097	-55°442		
9	+43°595	+61°060			9	+62°878	+47°209			12	-46°219	-50°421			9	-28°950	-59°510		
9	+44°062	+24°383			9	+64°899	+40°523			19	-46°159	-53°853	65 3064	9.4	11	-28°235	-27°968		
9	+44°241	+61°784			17	-64°893	-42°591	65 3051	9.2	16	-46°074	-45°120	65 3065	10.0	19	-28°093	-59°244	65 3078	9.4
9	+44°343	+54°847			9	-64°690	-37°422			13	-45°790	- 4°499	64 3185	9.8	9	-28°034	-40°870		
9	+44°677	+53°222			11	-64°288	-15°226			13	-45°680	-59°259			13	-27°880	-20°264		
12	+45°577	+19°641			9	-63°586	- 1°374			10	-45°296	-53°571			9	-27°787	-60°353		
9	+45°732	+41°032			20	-63°113	-13°474	65 3053	9.0	9	-44°598	-40°415			9	-27°729	-12°460		
9	+45°782	+ 0°510			9	-62°781	-21°805			18	-44°477	-14°140	65 3066	9.8	12	-27°578	-63°207	65 3079	10.0
	401					461					521					581			
16	+46°547	+14°785	64 3248	10.0	11	-62°762	- 9°091			9	-44°288	-25°914			9	-27°448	-52°462		
22	+46°572	+51°823	64 3247	9.0	11	-62°699	-46°727			9	-44°225	- 2°717			9	-27°406	-23°758		
9	+46°717	+28°573			9	-62°596	-16°626			14	-43°613	-16°723			9	-27°319	-33°209		
9	+46°985	+17°656			12	-62°213	-15°542			17	-43°023	- 9°541	65 3068	9.5	16	-27°043	- 8°073	65 3081	9.4
9	+47°158	+ 1°156			19	-61°903	- 0°654	64 3174	8.9	10	-42°850	-30°145			9	-26°429	-10°642		
12	+47°289	+43°920			21	-61°897	- 0°843	64 3173	8.8	13	-42°576	-43°219			12	-26°426	-43°326		
34	+47°530	+60°796	63 3647	8.2	11	-61°845	- 1°549			13	-42°425	-12°321			17	-26°405	-56°050	65 3080	9.7
9	+48°125	+28°537			12	-61°583	-43°737			9	-42°358	-19°315			9	-26°280	-62°053		
10	+49°079	+12°310			19	-61°337	-22°992	65 3055	9.2	25	-41°962	-33°252	65 3069	8.8	12	-25°565	-12°558		
15	+49°459	+55°494	63 3651	9.7	9	-61°062	-56°874			15	-41°667	-52°829			12	-25°500	-21°969		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591,					651,					711,					771,			
12	-25°326	-34°497			12	-9°060	-52°623			9	+5°374	-44°348			10	+19°768	-19°431		
9	-24°662	-4°145			24	-9°052	-1°089	64 3204	8°3	9	+5°520	-43°125			10	+19°783	-38°224		
11	-24°335	-45°557			13	-8°587	-7°028	65 3094	9°6	12	+5°672	-49°829			14	+19°988	-55°998	65 3115	9°4
18	-24°314	-10°691	65 3082	9°9	15	-8°427	-39°765			10	+6°044	-52°357			13	+20°053	-26°560		
9	-24°191	-30°408			19	-8°298	-61°963	65 3093	9°5	9	+6°056	-8°564			10	+20°539	-56°336		
9	-24°174	-48°013			9	-7°972	-53°458			18	+6°065	-31°259	65 3103	9°4	9	+20°550	-35°579		
9	-24°018	-12°042			11	-7°710	-52°550			11	+6°598	-53°941			9	+20°835	-64°241		
11	-23°679	-40°348			10	-7°709	-17°497			14	+6°686	-41°646	65 3104	10°0	9	+20°995	-13°431		
9	-23°508	-32°886			11	-7°609	-47°445			11	+6°841	-30°439			9	+21°749	-2°788		
9	-23°281	-30°226			9	-7°369	-41°321			10	+7°415	-35°429			9	+22°000	-0°342		
	601					661					721					781			
15	-21°869	-53°744			9	-7°104	-52°987			12	+7°858	-25°997			9	+22°704	-29°666		
9	-21°546	-47°617			13	-6°899	-15°756	65 3095	10°0	9	+8°190	-43°837			11	+22°784	-26°933		
18	-21°326	-33°818	65 3083	9°2	9	-6°635	-55°817			13	+8°214	-52°899			10	+23°068	-61°825		
9	-20°851	-4°113			10	-6°613	-55°729			9	+8°432	-52°463			9	+23°546	-9°046		
9	-20°435	-23°105			10	-6°517	-59°525			9	+8°548	-53°443			12	+23°614	-33°775		
9	-20°392	-37°139			10	-6°212	-1°817			10	+8°674	-7°400			11	+23°628	-34°244		
18	-19°887	-48°462	65 3084	9°0	9	-5°852	-55°620			15	+8°890	-54°742			11	+24°065	-61°279		
9	-19°812	-34°002			9	-5°827	-63°483			9	+9°602	-54°446			9	+24°077	-55°084		
12	-19°663	-49°675			13	-5°819	-49°925			12	+9°821	-24°062			9	+24°176	-7°595		
12	-19°379	-38°480			19	-5°656	-38°771	65 3096	9°1	10	+10°078	-9°344			10	+25°047	-51°706		
	611					671					731					791			
9	-19°130	-31°343			10	-5°521	-55°429			12	+10°149	-43°069			9	+25°270	-46°636		
9	-19°061	-27°688			9	-5°136	-53°531			15	+10°175	-13°201	65 3105	9°6	26	+25°341	-23°352	65 3116	8°2
9	-19°038	-49°825			12	-4°948	-40°377			12	+10°840	-61°673			12	+25°581	-33°561		
9	-18°849	-28°599			9	-4°864	-33°290			9	+11°005	-21°103			15	+27°639	-4°202	64 3234	9°8
9	-18°647	-38°701			9	-4°741	-62°828			12	+11°157	-26°950			18	+27°962	-2°873	64 3235	9°8
11	-18°133	-0°704			9	-4°375	-44°288			9	+11°524	-55°492			9	+28°102	-62°949		
9	-18°088	-29°101			9	-4°272	-7°523			19	+11°954	-56°060	65 3106	9°4	9	+28°172	-56°840		
12	-18°075	-56°446			34	-4°162	-55°388	65 3097	7°9	9	+12°217	-39°563			9	+28°222	-6°860		
11	-17°883	-13°367			15	-3°209	-26°131			9	+12°288	-61°666			12	+28°801	-46°598		
13	-17°801	-10°174	65 3087	9°8	11	-2°809	-46°778			17	+12°293	-4°896	64 3222	9°7	11	+28°884	-61°863		
	621					681					741					801			
20	-17°494	-60°904	65 3085	9°0	10	-1°892	-53°693			9	+12°298	-7°372			11	+28°997	-5°277		
17	-17°428	-36°016	65 3086	9°4	9	-1°818	-41°662			9	+12°477	-10°561			9	+29°019	-17°917		
14	-17°117	-53°646			10	-1°475	-24°766			16	+12°544	-33°815	65 3107	9°9	13	+29°619	-2°609		
9	-16°981	-49°338			11	-1°326	-26°336			14	+12°629	-29°721	65 3108	9°5	11	+29°652	-61°223		
9	-16°979	-21°726			19	-1°247	-58°196	65 3098	9°4	13	+12°635	-29°767			11	+29°702	-1°027		
11	-16°916	-40°411			13	-1°235	-32°225			15	+13°144	-54°493	65 3109	10°0	10	+30°238	-61°562		
9	-16°728	-50°643			9	-0°218	-32°675			9	+13°544	-7°227			9	+30°292	-18°357		
12	-16°486	-6°899			11	-0°195	-52°749			10	+14°330	-8°102			10	+30°304	-62°407		
20	-16°358	-1°390	64 3202	8°7	9	+0°079	-12°736			9	+14°696	-17°751			12	+30°451	-46°054		
22	-15°573	-50°502	65 3088	8°5	10	+0°471	-11°244			9	+15°115	-10°718			10	+30°484	-32°560		
	631					691					751					811			
9	-15°465	-49°650			11	+1°083	-15°126			10	+15°368	-62°785			9	+30°618	-32°904		
12	-15°265	-29°898			11	+1°277	-13°427			9	+15°561	-41°944			9	+30°673	-28°463		
13	-14°421	-28°852			13	+1°396	-55°756			9	+15°658	-58°432			9	+30°916	-28°161		
11	-13°774	-43°408			16	+1°631	-34°840	65 3099	9°6	15	+15°714	-42°000	65 3111	9°7	9	+31°639	-11°509		
9	-13°536	-58°227			12	+1°632	-56°816			17	+15°744	-7°941	65 3110	9°4	12	+31°865	-2°516		
12	-13°271	-39°566			9	+1°689	-0°795			13	+15°946	-17°274			9	+31°966	-37°006		
14	-12°153	-52°013	65 3089	10°0	10	+2°019	-47°200			12	+16°155	-35°789			9	+32°380	-45°588		
12	-12°005	-27°481			52	+2°059	-16°680	65 3100	7°2	18	+16°968	-40°540	65 3112	9°2	10	+32°430	-32°000		
13	-11°856	-56°833			9	+2°114	-57°294			13	+17°082	-16°022			19	+32°552	-28°931	65 3117	9°0
9	-11°628	-11°235			9	+2°270	-36°816			15	+17°445	-40°106	65 3113	10°0	11	+32°641	-0°606		
	641					701					761					821			
11	-11°625	-42°000			20	+2°781	-60°565	65 3101	8°9	9	+17°719	-34°056			11	+32°646	-7°028		
12	-11°571	-33°383	65 3090	10°0	9	+3°120	-58°491			10	+18°066	-15°530			9	+33°140	-1°367		
13	-11°537	-33°579			12	+3°273	-16°877			12	+18°155	-37°669			9	+33°219	-54°322		
9	-11°428	-38°977			9	+3°540	-6°101			9	+18°176	-45°564			16	+33°380	-14°713	65 3118	9°9
10	-10°300	-23°968			52	+3°620	-59°446	65 3102	6°2	9	+18°210	-1°098			9	+33°580	-4°963		
12	-10°049	-26°918	65 3092	9°8	9	+3°987	-26°295			9	+18°809	-26°292			9	+33°758	-8°048		
18	-9°913	-57°707	65 3091	9°5	9	+4°640	-63°631			11	+19°051	-33°525			15	+35°467	-42°541		
9	-9°553	-15°796			9	+4°686	-48°251			9	+19°386	-58°810			9	+35°908	-19°262		
9	-9°529	-16°375			9	+4°746	-56°551			15	+19°553	-14°648	65 3114	10°0	11	+36°013	-17°768		
10	-9°064	-27°304			12	+4°820	-49°524			9	+19°681	-22°599			9	+36°462	-2°693		

15h 27m, - 65°					15h 45m, - 65°					15h 55m, - 65°					16h 00m, - 65°				
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
16	831,				18	891,				PLATE CENTRE.						51,			
9	+36.707	-41.670	65 3119	9.6	9	+52.512	-9.114	65 3129	9.5		15h 45m, - 65°.					9	-58.866	+2.786	
10	+36.716	-1.781			9	+52.667	-48.865				Plate 1328. 1895, July 12.					9	-58.824	+2.537	
9	+36.910	-1.429			9	+53.223	-25.672				PROVISIONAL CONSTANTS.					15	-58.762	+16.987	
9	+36.980	-51.982			9	+53.775	-4.070				$a = -0.01120$ $d = +0.00006$					9	-58.756	+20.599	
9	+37.106	-2.334			14	+53.972	-26.557				$b = -0.00013$ $e = -0.01109$					9	-58.470	+33.257	
9	+38.461	-57.174			12	+54.086	-17.016				$c = -0.1885$ $f = +0.1017$					10	-58.342	+17.416	
12	+38.526	-11.794			12	+54.835	-25.158				To obtain standard co-ordinates, ξ, η					9	-58.151	+16.295	
9	+38.904	-4.705			9	+55.019	-46.810				$\xi = x + ax + by + c$					10	-57.985	+43.209	
11	+39.134	-22.126			12	+55.128	-26.705				$\eta = y + dx + ey + f$					9	-57.835	+6.113	
12	+39.836	-29.950			9	+55.215	-4.720									9	-57.533	+40.985	
	841					901											61		
9	+40.138	-31.796			14	+55.778	-35.477			10	-64.979	+17.331			9	-57.285	+29.394		
9	+40.251	-20.380			9	+55.798	-3.060			9	-64.682	+14.409			9	-56.951	+28.904		
22	40.256	-42.660	65 3121	8.8	11	+55.867	-13.369			9	-64.675	+2.681			9	-56.833	+21.329		
11	+40.332	-28.501			12	+56.418	-33.248			9	-64.304	+11.584			9	-56.362	+49.350		
15	+40.696	-9.093	65 3120	9.5	10	+56.559	-36.310			10	-64.264	+10.224			9	-56.320	+48.072		
9	+40.936	-36.809			17	+56.963	-4.388	64 3255	9.4	10	-64.244	+57.033			9	-56.190	+44.224		
19	+41.026	-36.943	65 3122	9.2	10	+56.984	-33.645			9	-64.216	+57.043			9	-56.136	+62.756		
9	+41.158	-25.294			15	+57.014	-30.479			9	-64.162	+35.196			9	-55.947	+47.258		
9	+41.259	-36.551			9	+57.687	-61.573			9	-63.989	+4.326			15	-55.812	+40.812		
11	+41.299	-18.866			11	+58.147	-42.611			9	-63.787	+53.150			9	-55.734	+35.347		
	851					911										71			
9	+41.307	-15.928			9	+58.526	-23.752			9	-63.678	+10.624			9	-55.380	+36.793		
11	+41.389	-15.950			20	+58.537	-17.007	65 3130	9.2	9	-63.538	+1.472			15	-55.368	+23.161		
13	+41.421	-33.379			23	58.852	-27.235	65 3131	8.6	9	-63.272	+39.480			9	-55.364	+39.613		
9	+41.724	-25.603			16	+59.289	-25.652	65 3132	9.5	10	-62.266	+55.719			9	-55.301	+18.759		
9	+41.774	-60.352			9	+60.176	-1.667			9	-63.241	+49.738			9	-55.281	+0.898		
12	+41.956	-4.602			10	+60.728	-56.760			12	-63.219	+4.346			9	-55.236	+30.849		
10	+42.004	-11.626			21	+61.345	-11.234	65 3133	8.6	9	-63.161	+39.007			9	-54.885	+44.074		
20	+42.094	-55.396	65 3123	9.2	9	+62.413	-28.275			9	-62.932	+50.716			9	-54.815	+51.021		
12	+42.377	-4.088			15	+62.930	-52.680	65 3134	9.9	9	-62.792	+22.035			9	-54.489	+29.220		
13	+42.410	-27.249			9	+63.389	-22.928			9	-62.693	+19.027			9	-54.233	+27.542		
	861					921										81			
11	+42.599	-9.674			10	+63.406	-35.178			9	-62.615	+13.288			9	-54.226	+5.097		
12	+42.729	-49.843			13	+64.550	-3.274			9	-62.579	+44.550			9	-54.138	+13.254		
9	+43.140	-20.410								9	-62.555	+0.240			9	-54.014	+7.787		
10	+43.252	-48.925								9	-62.513	+51.857			9	-53.922	+63.173		
17	+44.100	-37.649	65 3124	9.5						10	-62.437	+37.218			9	-53.657	+57.905		
10	+44.304	-48.220								15	-62.343	+34.119	64 3252	10.0	9	-53.564	+39.762		
9	+44.462	-23.236								9	-62.245	+41.038			9	-53.440	+40.750		
11	+45.371	-41.929								9	-62.051	+55.888			9	-53.331	+32.757		
17	+45.393	-51.906	65 3125	9.8						15	-61.778	+53.006	64 3253	9.5	9	-52.920	+53.568		
9	+45.533	-1.246								9	-61.748	+60.794			9	-52.816	+32.086		
	871															91			
11	+45.578	-49.358								9	-61.644	+29.751			9	-52.682	+23.125		
13	+46.231	-52.378	65 3126	9.9						10	-61.531	+24.289			9	-52.569	+6.883		
9	+46.481	-27.186								9	-61.452	+13.862			9	-52.288	+11.856		
10	+46.864	-8.123								9	-61.322	+19.668			9	-52.279	+52.199		
12	+47.463	-15.372								11	-61.259	+40.834			9	-52.206	+14.605		
20	+47.487	-39.340	65 3127	9.1						9	-61.197	+41.563			10	-52.058	+13.153		
9	+47.518	-20.676								9	-61.156	+12.823			9	-51.456	+2.872		
9	+47.747	-59.212								9	-60.841	+3.116			9	-51.123	+53.836		
11	+48.903	-57.298								11	-60.737	+0.368			9	-50.952	+23.158		
9	+49.003	-17.274								9	-60.333	+44.542			15	-50.786	+12.040		
	881															101			
9	+49.140	-29.716								9	-60.156	+64.982			19	-50.744	+24.838	64 3257 9.6	
9	+50.064	-35.160								9	-60.141	+23.237			9	-50.305	+36.203		
11	+50.223	-35.814								9	-60.116	+11.646			15	-50.274	+25.946		
15	+50.635	-59.278	65 3128	9.4						15	-60.018	+8.823	64 3254	9.9	9	-50.158	+52.354		
9	+50.720	-34.377								9	-59.888	+48.181			11	-50.151	+12.453		
9	+51.650	-9.699								9	-59.753	+28.480			11	-50.066	+21.406		
10	+51.659	-4.530								10	-59.674	+44.577			9	-49.967	+13.309		
32	+51.733	-4.986	64 3251	8.0						9	-59.351	+55.636			16	-49.737	+14.852	64 3259 9.9	
9	+52.187	-18.612								16	-59.109	+44.764	64 3256	9.5	9	-49.728	+22.692		
9	+52.255	-37.015								9	-59.023	+29.632			17	-49.415	+26.733	64 3261 9.5	

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
9	-49°314	+ 8°419			9	-42°514	+53°048			20	-34°649	+ 4°721	64 3269	9°1	14	-25°101	+ 4°933	64 3274	9°7
9	-49°245	+35°120			9	-42°512	+ 7°386			9	-34°486	+37°949			9	-25°084	+25°801		
10	-49°188	+ 5°727			9	-42°494	+48°824			9	-34°455	+25°192			9	-25°024	+21°042		
9	-49°074	+20°214			9	-42°337	+42°090			15	-34°408	+17°929			11	-24°994	+47°559		
9	-48°910	+ 0°074			17	-42°329	+53°002	64 3266	9°0	9	-34°305	+10°474			9	-24°952	+48°485		
17	-48°900	+ 6°953	64 3260	9°0	9	-42°136	+46°546			10	-34°163	+24°897			9	-24°632	+59°167		
9	-48°840	+58°239			9	-42°098	+41°904			9	-33°992	+18°591			9	-24°594	+63°639		
9	-48°740	+ 0°525			9	-42°086	+15°710			16	-33°877	+39°279	64 3270	9°8	13	-24°458	+38°363		
9	-48°522	+28°072			15	-41°945	+58°772	63 3676	10°0	9	-33°735	+ 1°060			9	-24°420	+ 1°354		
12	-48°350	+ 1°868			15	-41°936	+41°034			9	-33°709	+39°519			9	-23°882	+ 7°770		
	121					181					241					301			
9	-48°244	+22°075			9	-41°840	+28°628			9	-33°508	+43°634			9	-23°836	+29°142		
9	-48°166	+29°545			10	-41°763	+13°072			9	-32°870	+16°785			15	-23°654	+ 6°852		
9	-48°092	+42°600			11	-41°689	+45°921			9	-32°646	+41°176			9	-22°988	+14°009		
9	-47°893	+48°612			11	-41°556	+41°894			9	-32°606	+44°568			16	-22°549	+62°317	63 3692	9°3
15	-47°455	+53°719			9	-41°409	+ 7°198			17	-31°995	+20°210	64 3271	9°4	10	-22°540	+34°004	64 3276	9°7
18	-47°329	+12°146	64 3262	9°2	10	-41°376	+43°254			10	-31°909	+ 5°825			9	-22°490	+ 5°694		
9	-47°836	+29°654			9	-41°226	+54°227			9	-31°891	+ 3°932			19	-22°443	+33°020	64 3275	8°9
15	-46°793	+56°079	63 3672	9°2	9	-40°964	+58°151			9	-31°707	+60°116			9	-22°414	+ 0°856		
9	-46°787	+ 0°585			11	-40°535	+25°288			9	-31°559	+49°670			15	-22°317	+41°392	64 3277	9°7
9	-46°698	+63°150			10	-40°377	+55°850			9	-31°416	+43°758			9	-22°150	+50°620		
	131					191					251					311			
9	-46°577	+11°942			9	-40°242	+53°825			9	-31°295	+27°573			9	-22°090	+26°750		
16	-46°542	+31°571	64 3263	9°9	10	-39°830	+25°579			9	-31°213	+50°434			9	-21°725	+14°700		
9	-46°394	+ 8°233			9	-39°514	+44°560			17	-31°185	+60°151	63 3681	9°4	9	-21°632	+34°434		
9	-46°288	+14°064			9	-39°485	+22°505			9	-30°734	+44°941			15	-21°372	+30°567	64 3278	9°4
9	-46°187	+ 3°288			9	-39°450	+14°662			9	-30°733	+49°918			9	-21°156	+38°512		
15	-46°084	+28°570			9	-38°857	+15°073			9	-30°503	+55°557			10	-21°132	+21°414		
9	-45°962	+25°070			9	-38°792	+48°490			9	-30°473	+53°275			9	-20°772	+60°798		
9	-45°920	+22°868			9	-38°770	+40°780			9	-30°138	+17°893			9	-20°211	+52°661		
20	-45°912	+54°289	64 3264	7°9	9	-38°699	+29°841			9	-29°870	+24°258			9	-20°080	+32°406		
9	-45°877	+55°815			9	-38°504	+20°084			10	-29°866	+27°624			9	-20°024	+49°389		
	141					201					261					321			
9	-45°500	+36°570			9	-38°426	+14°650			9	-29°800	+ 4°654			9	-19°882	+48°252		
9	-45°448	+56°595			15	-38°293	+20°141			19	-29°788	+62°964	63 3682	8°6	9	-19°664	+41°070		
9	-45°390	+29°626			9	-38°261	+46°400			9	-29°671	+18°398			10	-19°544	+42°334		
9	-45°352	+27°200			9	-38°162	+14°438			9	-29°599	+10°584			14	-19°178	+47°724		
9	-45°335	+ 4°349			9	-37°963	+23°327			9	-29°566	+ 6°346			15	-19°015	+ 7°911		
9	-45°248	+ 8°917			9	-37°623	+26°568			9	-29°391	+59°331			9	-18°928	+50°080		
9	-44°852	+42°882			10	-37°547	+ 6°793			9	-29°231	+43°889			9	-18°894	+60°218		
9	-44°799	+19°461			9	-37°477	+42°628			9	-29°029	+ 7°845			9	-18°729	+34°275		
9	-44°664	+20°800			16	-37°425	+54°066	64 3267	9°5	10	-28°690	+ 2°104			9	-18°714	+51°875		
11	-44°354	+ 8°839			9	-37°366	+60°200			9	-28°508	+57°959			10	-18°662	+31°671		
	151					211					271					331			
9	-44°244	+49°747			9	-37°299	+32°653			9	-28°466	+61°384			15	-18°595	+63°841	63 3695	9°7
10	-44°199	+34°591			9	-37°165	+22°165			10	-28°297	+44°111			9	-18°539	+49°402		
9	-44°137	+14°682			9	-36°801	+21°432			9	-28°290	+58°332			9	-18°218	+49°583		
11	-44°111	+37°531			9	-36°555	+28°781			9	-28°276	+21°556			11	-18°193	+14°034		
9	-44°079	+18°023			10	-36°493	+28°449			9	-28°268	+ 9°877			9	-18°181	+29°777		
9	-44°069	+43°057			9	-36°441	+33°179			19	-27°995	+12°218	64 3272	9°4	9	-18°167	+44°408		
15	-44°000	+49°085			16	-36°272	+45°130	64 3268	9°4	9	-27°654	+51°868			11	-17°645	+ 2°585		
9	-43°861	+28°626			9	-35°988	+13°248			9	-27°641	+11°262			9	-17°126	+21°925		
9	-43°822	+16°151			9	-35°923	+51°218			18	-27°345	+33°189	64 3273	9°2	10	-16°444	+15°941		
9	-43°694	+ 9°773			9	-35°894	+45°745			10	-27°330	+ 4°916			9	-16°440	+52°135		
	161					221					281					341			
9	-43°642	+49°665			10	-35°821	+ 2°339			15	-27°160	+48°571			15	-16°342	+53°142	64 3279	9°0
9	-43°592	+46°061			9	-35°764	+10°848			9	-27°000	+61°259			9	-16°159	+ 0°130		
9	-43°550	+28°508			9	-35°684	+36°679			9	-26°713	+33°078			9	-15°688	+52°441		
11	-43°465	+34°021			9	-35°682	+18°667			9	-26°627	+22°828			14	-15°397	+33°533	64 3280	9°7
9	-43°130	+ 5°065			9	-35°542	+13°535			9	-26°499	+43°557			9	-15°152	+11°542		
10	-43°068	+40°956			9	-35°490	+14°396			9	-25°782	+62°684			9	-14°722	+31°655		
9	-42°956	+ 5°381			9	-35°228	+36°025			9	-25°536	+35°562			9	-14°428	+60°291		
9	-42°890	+ 6°748			9	-35°199	+ 4°365			15	-25°460	+63°359	63 3688	9°5	9	-14°323	+47°728		
10	-42°761	+31°945			9	-35°085	+41°482			16	-25°399	+60°573	63 3689	9°4	10	-13°946	+36°677		
10	-42°740	+ 7°372			9	-34°929	+41°541			9	-25°169	+50°681			9	-13°914	+31°242		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
9	-13.898	+30.921			9	-5.399	+25.281			9	+6.744	+31.912			15	+17.054	+40.501		
9	-13.697	+42.447			9	-5.336	+16.870			9	+6.748	+61.553			15	+17.060	+56.672	63 3732	9.5
9	-13.634	+32.381			9	-5.181	+30.153			11	+6.754	+9.677			15	+17.313	+12.905	64 3309	9.4
9	-13.488	+62.156			16	-4.997	+36.941	64 3292	9.2	15	+6.972	+56.546	63 3720	9.5	9	+17.408	+17.558		
9	-13.475	+64.721			9	-4.912	+47.732			9	+7.006	+48.794			10	+17.456	+22.227		
17	-13.431	+23.040	64 3281	9.1	9	-4.804	+54.681			9	+7.065	+64.185			9	+17.515	+1.177		
9	-13.417	+40.898			9	-4.762	+55.733			11	+7.128	+60.497			9	+17.956	+54.528		
11	-13.208	+50.238	64 3282	9.7	9	-4.503	+42.174			9	+7.317	+45.322			9	+18.054	+55.416		
9	-13.104	+32.561			11	-4.417	+57.560			9	+7.514	+33.524			9	+18.444	+63.389		
9	-12.990	+18.982			9	-4.247	+42.258			9	+7.719	+18.410			9	+18.547	+50.484		
	361					421					481					541			
9	-12.449	+54.415			9	-4.152	+43.602			16	+7.789	+52.624	64 3299	9.1	9	+18.737	+50.150		
9	-12.244	+34.611			9	-3.756	+61.315			15	+8.323	+35.212	64 3300	9.6	9	+18.789	+56.448		
11	-12.156	+8.236			9	-3.753	+24.585			9	+8.668	+41.027			16	+19.002	+63.936	63 3736	9.2
10	-12.061	+45.001			9	-3.615	+5.696			9	+8.788	+10.144			17	+19.282	+57.496	63 3737	9.0
13	-11.940	+9.523			17	-3.073	+37.704	64 3293	9.2	9	+8.938	+9.523			10	+19.374	+61.649		
9	-11.642	+30.635			9	-2.931	+49.968			9	+9.020	+26.581			9	+19.426	+60.299		
16	-11.449	+52.532	64 3284	9.4	9	-2.734	+52.659			9	+9.070	+55.155			15	+19.549	+5.741	64 3310	9.5
15	-11.321	+26.904	64 3283	9.5	9	-2.662	+12.112			9	+9.082	+11.938			9	+19.595	+5.329		
9	-11.162	+30.519			10	-2.360	+15.953			10	+9.413	+57.367			12	+19.918	+50.580	64 3311	9.6
9	-10.963	+53.317			9	-2.158	+20.560			9	+9.824	+8.031			9	+19.927	+2.765		
	371					431					491					551			
9	-10.712	+25.790			9	-2.076	+5.161			11	+10.015	+46.699			10	+20.038	+50.401		
9	-10.629	+41.335			11	-2.031	+63.255			17	+10.542	+6.814	64 3301	9.2	9	+20.157	+37.864		
9	-10.376	+34.281			9	-1.881	+5.163			16	+10.629	+43.767	64 3302	9.4	9	+20.284	+27.540		
9	-10.242	+58.765			9	-1.737	+29.447			9	+10.630	+2.720			9	+20.373	+47.204		
9	-9.607	+0.931			9	-1.351	+60.305			17	+10.860	+8.873	64 3304	9.1	15	+20.760	+12.120	64 3313	9.6
9	-9.582	+61.171			9	-0.564	+45.738			19	+10.900	+25.271	64 3303	9.0	9	+20.845	+20.457		
9	-9.242	+4.958			9	-0.305	+42.490			9	+11.221	+39.392			16	+21.043	+46.707	64 3312	9.3
9	-9.174	+51.374			9	-0.233	+58.815			9	+11.258	+63.717			9	+21.134	+33.329		
11	-8.953	+54.722			12	+0.318	+13.814	64 3294	9.7	17	+12.102	+37.322	64 3305	9.2	9	+21.148	+56.893		
9	-8.937	+39.565			9	+0.905	+35.923			9	+12.270	+11.865			10	+21.374	+30.834		
	381					441					501					561			
9	-8.911	+50.414			9	+1.070	+55.603			9	+12.272	+54.344			10	+21.513	+20.501		
9	-8.887	+45.618			11	+1.332	+5.189			9	+12.305	+60.682			10	+21.726	+35.934		
9	-8.875	+23.345			9	+1.528	+53.365			9	+12.347	+22.637			9	+21.911	+18.848		
9	-8.869	+9.376			9	+1.741	+39.440			9	+12.844	+1.804			9	+22.087	+23.487		
9	-8.745	+24.587			9	+2.153	+12.664			9	+13.121	+23.311			9	+22.241	+18.894		
15	-8.689	+48.348	64 3285	9.6	9	+2.170	+18.331			9	+13.172	+26.511	64 3303	9.0	9	+22.268	+43.032		
9	-8.681	+59.615			9	+2.466	+28.237			14	+13.324	+27.924			9	+22.282	+19.123		
9	-8.252	+33.701			9	+2.477	+47.624			9	+13.677	+21.553			10	+22.821	+1.584		
9	-8.006	+16.410			9	+2.604	+52.287			9	+13.858	+11.099			11	+22.975	+46.953		
9	-7.888	+36.841			9	+2.844	+27.828			9	+13.883	+34.239			9	+22.980	+38.354		
	391					451					511					571			
9	-7.886	+14.628			9	+2.984	+41.082			16	+14.150	+35.622	64 3307	9.6	9	+22.998	+25.175		
15	-7.647	+38.468	64 3287	9.4	9	+3.251	+57.049			11	+14.172	+32.782			9	+23.005	+24.791		
9	-7.633	+28.163			9	+3.400	+63.665			9	+14.335	+20.493			15	+23.023	+10.110	64 3314	9.5
15	-7.612	+43.752	64 3289	9.5	10	+3.743	+16.759			9	+14.388	+46.004			11	+23.082	+35.510		
36	-7.528	+8.959	64 3286	7.4	9	+3.846	+48.187			9	+14.623	+17.676			10	+23.252	+19.163		
9	-7.521	+58.877			14	+3.876	+33.245	64 3295	9.7	9	+14.900	+18.068			11	+23.359	+64.469	63 3739	9.7
18	-7.408	+17.584	64 3288	9.0	10	+4.147	+41.660			9	+15.285	+4.017			11	+23.472	+33.452		
9	-7.155	+20.505			9	+4.306	+38.981			10	+15.561	+25.571			9	+23.491	+21.047		
10	-7.053	+47.809			15	+4.628	+59.842	63 3716	9.4	9	+15.765	+35.170			15	+23.706	+40.324		
9	-7.045	+20.921			17	+5.170	+64.221	63 3717	9.1	11	+16.025	+5.851			9	+23.722	+57.410		
	401					461					521					581			
9	-7.036	+36.833			9	+5.612	+11.428			9	+16.098	+19.552			10	+23.827	+30.660		
15	-6.714	+19.375	64 3290	9.3	16	+5.685	+17.826	64 3296	9.3	9	+16.342	+8.112			14	+23.870	+10.245		
9	-6.433	+63.798			10	+5.788	+32.696			9	+16.397	+57.656			9	+24.024	+33.520		
11	-6.243	+6.075			9	+5.929	+10.699			9	+16.483	+0.994			9	+24.421	+54.054		
9	-5.751	+35.499			9	+6.003	+38.574			15	+16.530	+41.877			9	+25.007	+49.258		
9	-5.727	+55.592			11	+6.341	+9.615			9	+16.795	+11.211			15	+25.606	+54.118		
9	-5.721	+56.004			10	+6.515	+41.247			9	+16.795	+33.925			9	+25.636	+25.809		
32	-5.710	+18.069	64 3291	8.1	11	+6.627	+62.816			9	+16.869	+57.423			9	+25.939	+18.715		
9	-5.501	+56.625			16	+6.667	+11.633	64 3297	9.3	9	+16.887	+53.485			9	+26.330	+47.374		
10	-5.425	+46.306			15	+6.713	+33.610	64 3298	9.6	16	+17.044	+64.711	63 3733	9.1	17	+26.488	+12.268	64 3315	9.2

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591					651					711					771			
9	+26°544	+52°041			9	+36°813	+58°645			12	+45°528	+13°161			9	+53°992	+40°442		
9	+27°592	+50°430			9	+37°024	+20°157			16	+45°576	+3°075	64 3340	9°1	17	+53°099	+3°618	64 3349	9°2
9	+27°756	+63°702			9	+37°033	+12°665			16	+45°700	+36°714	64 3338	9°4	9	+54°115	+17°253		
15	+27°888	+25°739			9	+37°082	+0°044			17	+45°728	+20°643	64 3339	9°2	19	+54°159	+61°849	63 3773	9°0
9	+27°928	+31°988			21	+37°189	+25°829	64 3326	8°6	9	+45°926	+57°186			9	+54°109	+39°531		
9	+27°968	+60°029			9	+37°246	+62°531			9	+46°183	+27°386			9	+54°204	+50°638		
9	+28°037	+38°054			9	+37°369	+63°933			9	+46°325	+27°143			9	+54°271	+16°158		
9	+28°065	+54°851			16	+37°458	+56°337	63 3753	9°3	9	+46°395	+17°274			9	+54°384	+47°727		
12	+28°212	+49°770	64 3316	9°7	9	+37°687	+39°422			15	+46°990	+26°840	64 3341	9°3	17	+54°596	+9°982	64 3350	9°1
9	+28°487	+53°950			9	+37°770	+42°448			9	+47°132	+50°713			11	+54°816	+44°984	64 3348	9°6
	601					661					721					781			
9	+28°512	+24°781			16	+38°151	+15°532	64 3327	9°1	15	+47°202	+1°225	64 3342	9°7	9	+55°550	+39°812		
9	+28°707	+2°338			9	+38°512	+60°905			9	+47°236	+6°596			9	+55°821	+51°069		
9	+28°853	+8°543			16	+38°808	+43°256	64 3329	9°3	9	+48°113	+28°029			9	+56°354	+50°768		
10	+28°861	+2°049			15	+38°869	+46°575	64 3328	9°4	9	+48°194	+29°589			9	+56°597	+41°753		
9	+28°924	+23°403			9	+39°000	+3°338			9	+48°263	+7°511			9	+56°759	+10°819		
9	+29°064	+61°250			9	+39°015	+29°593			10	+48°268	+52°918			9	+56°935	+45°031		
9	+29°174	+56°006			9	+39°073	+39°576			9	+48°300	+27°975			9	+57°004	+15°322		
16	+29°395	+0°378	64 3319	9°3	9	+39°428	+62°957			9	+48°308	+9°077			9	+57°235	+23°785		
15	+29°444	+10°820	64 3318	9°5	20	+39°608	+53°240	64 3330	8°6	11	+48°324	+55°718			9	+57°245	+63°703		
15	+29°478	+14°512	64 3317	9°5	18	+39°680	+61°509	63 3757	9°1	9	+48°401	+16°047			9	+57°732	+11°736		
	611					671					731					791			
9	+29°860	+12°104			17	+39°786	+47°954	64 3331	9°6	9	+48°512	+27°859			9	+58°261	+14°562		
10	+29°867	+22°614			9	+39°811	+36°861			9	+48°628	+20°983			10	+58°357	+18°483		
9	+29°985	+11°190			24	+39°849	+30°602	64 3332	8°7	9	+48°663	+36°624			12	+58°548	+2°352		
9	+30°196	+54°868			9	+40°058	+52°960			10	+48°885	+24°226			9	+58°560	+20°078		
9	+30°671	+56°406			9	+40°134	+43°447			9	+48°916	+64°563			12	+58°828	+21°700		
9	+30°789	+41°106			15	+40°314	+43°792	64 3333	9°7	10	+49°079	+17°593			9	+58°866	+12°015		
15	+31°107	+60°815			9	+40°337	+21°479			9	+49°103	+23°571			16	+59°313	+50°876	64 3351	9°2
35	+31°213	+14°924	64 3320	6°2	9	+40°439	+22°747			16	+49°222	+41°592	64 3343	9°2	14	+59°533	+41°829	64 3352	9°5
9	+31°651	+5°311			9	+40°540	+36°703			10	+49°688	+13°411			9	+59°640	+6°750		
9	+32°007	+11°786			15	+40°688	+13°738	64 3334	9°7	9	+49°805	+45°268			9	+60°017	+11°803		
	621					681					741					801			
10	+32°210	+20°325			9	+40°695	+12°602			9	+49°821	+42°854			9	+60°079	+36°735		
10	+32°441	+29°471			15	+40°983	+25°628	64 3335	9°6	9	+49°837	+55°293			9	+60°242	+53°888		
9	+32°626	+21°471			10	+41°001	+43°712			11	+50°148	+42°836			11	+60°914	+10°203		
9	+32°645	+37°959			9	+41°001	+62°261			12	+50°176	+12°727			9	+61°045	+9°153		
9	+32°671	+29°341			9	+41°105	+57°629			11	+50°518	+47°712	64 3344	9°3	9	+61°238	+24°264		
9	+33°078	+2°232			10	+41°107	+30°306			9	+50°830	+46°627			9	+61°328	+15°952		
10	+33°117	+1°007	64 3323	9°7	9	+41°438	+18°097			11	+50°880	+44°903			9	+61°357	+8°106		
9	+33°351	+14°249			9	+41°530	+37°491			9	+50°964	+58°141			11	+61°430	+55°913		
10	+33°632	+1°661			9	+41°827	+3°043			10	+51°073	+32°452			9	+61°438	+1°902		
9	+33°730	+33°719			9	+41°944	+43°438			11	+51°131	+43°646			10	+61°489	+6°270		
	631					691					751					811			
15	+33°739	+48°966	64 3322	9°4	9	+42°039	+34°522			9	+51°185	+31°620			9	+61°579	+2°287		
10	+33°944	+55°736			9	+42°128	+18°247			16	+51°301	+40°423	64 3345	9°2	9	+61°836	+14°017		
9	+33°968	+34°660			9	+42°318	+55°787			9	+51°320	+36°603			9	+61°872	+17°284		
15	+34°050	+31°002	64 3324	9°2	9	+42°459	+15°971			9	+51°397	+6°052			9	+62°012	+24°649		
9	+34°146	+6°037			9	+42°522	+12°008			9	+51°756	+34°814			10	+63°086	+53°336		
11	+34°379	+48°089			9	+42°545	+18°687			32	+51°790	+52°758	64 3346	7°6	25	+63°384	+48°175	64 3353	8°5
9	+34°449	+43°533			9	+42°545	+56°264			9	+51°886	+8°994			9	+63°589	+40°720		
9	+34°505	+17°177			9	+42°577	+27°819			9	+51°937	+46°829			9	+63°741	+32°545		
9	+34°568	+31°277			10	+42°785	+9°862			9	+51°961	+61°751			9	+63°765	+2°048		
9	+34°737	+48°090			14	+42°899	+12°730	64 3336	9°7	14	+51°985	+56°333			9	+64°100	+37°994		
	641					701					761					821			
9	+34°854	+25°265			9	+43°051	+64°255			12	+52°094	+17°991			9	+64°460	+5°471		
11	+35°133	+55°880			9	+43°307	+50°748			9	+52°652	+16°945			17	+64°490	+10°267	64 3356	9°1
9	+35°171	+51°981			15	+43°507	+24°827	64 3337	9°7	9	+52°655	+29°905			9	+64°628	+9°908		
9	+35°323	+45°534			9	+44°056	+40°586			9	+53°064	+50°752			9	+64°609	+33°688		
9	+35°663	+13°216			9	+44°532	+49°562			9	+53°133	+11°283			9	+64°670	+33°690		
11	+35°717	+13°291			9	+44°587	+8°459			9	+53°461	+48°069			10	+64°925	+1°255		
15	+36°067	+27°203	64 3325	9°7	9	+44°619	+55°866			9	+53°488	+44°062			9	+64°980	+31°568		
9	+36°238	+3°694			9	+44°920	+37°232			16	+53°628	+46°783	64 3347	8°7	9	+64°694	+5°237		
9	+36°354	+51°122			9	+45°244	+4°426			16	+53°644	+46°901			9	+64°151	+30°419		
15	+36°768	+43°647			9	+45°430	+3°529			9	+53°698	+47°649			9	+63°452	+59°923		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
II	831,				9	891,				40	951,				20	1011,					
26	-63°420	-5°119	64 3251	8.0	9	-50°384	-1°855	64 3258	9.2	13	-39°592	-8°429	65 3139	6.3	9	-29°281	-35°591	65 3144	9.9		
9	-63°330	-5°565			9	-50°079	-4°833			9	-39°229	-34°169			9	-29°165	-21°055				
10	-63°072	-10°275			19	-49°765	-1°151			9	-39°205	-42°703			9	-28°600	-41°533				
9	-62°858	-35°774			16	-49°673	-7°067			9	-38°706	-6°807			10	-28°202	-4°440				
12	-62°648	-36°440			14	-49°658	-4°263			9	-38°669	-14°804			11	-28°195	-42°183				
10	-62°456	-57°926	65 3129	9.5	12	-49°569	-34°840	65 3134	9.9	9	-38°656	-36°802	65 3140	9.8	15	-28°191	-6°393	65 3145	9.7		
16	-62°254	-9°623			9	-49°392	-7°215			9	-38°522	-6°873			14	-28°111	-43°633				
9	-62°245	-34°949			9	-48°999	-26°190			19	-38°486	-52°298			15	-28°050	-28°401				
10	-61°907	-19°117			19	-48°799	-52°319			19	-38°254	-50°126			15	-28°007	-35°695				
9	-61°545	-41°275			11	-48°742	-14°768			9	-38°126	-55°572			15	-27°771	-42°704				
	841		65 3128	9.4		901		65 3136	9.7		961		65 3141	8.6		1021		65 3146	9.6		
10	-61°356	-4°511			9	-47°903	-2°044			12	-37°986	-46°195			9	-27°569	-39°189				
9	-61°021	-3°859			11	-47°731	-1°545			9	-37°878	-20°187			9	-27°561	-36°965				
10	-60°978	-0°424			10	-47°466	-20°551			9	-37°822	-11°184			9	-27°442	-26°838				
19	-60°583	-59°796			11	-47°302	-28°051			22	-37°607	-12°740			9	-27°390	-53°885				
10	-60°528	-37°486	9	-47°210	-57°450	12	-37°288			-37°126	11	-27°176			-43°324						
9	-60°524	-54°472	64 3255	9.4	9	-47°174	-8°767			65 3137	10.0	12	-37°117	-12°543	65 3142	10.0	11	-27°128	-11°988	65 3147	9.3
9	-60°353	-26°101			9	-47°159	-32°241					14	-37°002	-45°193			14	-27°039	-22°527		
14	-60°125	-17°417			10	-47°134	-56°039					15	-36°868	-45°191			16	-27°027	-59°419		
10	-60°117	-5°631			11	-46°670	-11°224					11	-36°600	-42°853			9	-26°877	-64°851		
9	-59°858	-5°059			19	-46°569	-34°669					10	-36°554	-47°199			10	-26°705	-4°682		
	851		65 3130	9.2		911		64 3265	9.0				971		65 3143	9.2		1031		65 3148	9.7
14	-59°551	-26°924			9	-46°294	-38°353					9	-36°536	-52°149			9	-26°636	-17°383		
9	-59°426	-3°346			9	-46°111	-64°085					10	-36°523	-57°299			14	-26°407	-47°845		
10	-59°252	-49°258			9	-45°986	-9°420					19	-36°421	-41°795			9	-26°361	-21°392		
14	-58°779	-25°464			15	-45°921	-47°604					9	-36°320	-24°984			9	-26°352	-29°968		
10	-58°617	-13°624	15	-45°890	-49°938	9	-36°012					-27°014	9	-26°333			-35°623				
14	-58°381	-26°988	65 3131	8.6	9	-45°770	-62°445			65 3138	9.4	9	-35°976	-8°893	65 3144	9.2	9	-25°975	-23°761	65 3149	9.5
18	-58°156	-4°592			10	-45°490	-31°875					11	-35°784	-3°168			9	-25°872	-31°147		
9	-57°934	-48°492			10	-45°278	-12°607					15	-35°691	-60°738			9	-25°765	-23°963		
9	-57°889	-44°233			12	-45°154	-12°270					9	-35°585	-32°689			9	-25°704	-44°553		
9	-57°817	-37°928			14	-45°099	-50°819					11	-35°517	-31°315			10	-25°584	-49°591		
	861		65 3132	9.5		921		65 3139	9.4				981		65 3145	10.0		1041		65 3150	9.4
9	-57°748	-4°570			10	-45°061	-26°024					17	-35°423	-40°891			13	-25°551	-6°113		
16	-57°124	-35°694			16	-45°046	-26°140					9	-35°375	-57°782			9	-25°523	-55°157		
12	-57°086	-47°042			9	-44°919	-0°213					9	-34°884	-3°337			9	-25°434	-44°488		
12	-56°660	-33°436			9	-44°672	-49°043					19	-34°700	-51°675			9	-25°347	-23°889		
10	-56°292	-36°459	9	-44°647	-23°395	9	-34°476					-5°247	10	-25°273			-29°264				
15	-56°252	-30°617	65 3133	8.6	11	-44°427	-4°718			65 3140	9.0	9	-34°441	-8°474	65 3146	9.6	14	-25°252	-28°738	65 3155	9.5
11	-56°054	-33°773			9	-44°425	-9°487					9	-34°302	-6°874			14	-24°521	-40°496		
19	-55°700	-17°088			14	-44°207	-0°151					12	-33°876	-56°472			9	-24°304	-14°769		
9	-55°351	-14°630			12	-43°651	-39°104					9	-33°808	-35°821			10	-24°040	-41°634		
9	-55°305	-27°854			15	-43°630	-11°162					10	-33°752	-35°896			14	-23°348	-26°231		
	871		65 3134	9.5		931		65 3141	9.0				991		65 3147	9.3		1051		65 3152	9.4
10	-55°228	-23°790			9	-43°414	-59°468					10	-33°727	-12°199			9	-23°233	-16°182		
11	-55°154	-1°660			9	-43°407	-45°520					9	-33°486	-8°510			9	-23°028	-0°318		
26	-54°633	-27°254			9	-43°178	-25°847					9	-33°417	-33°685			14	-22°967	-55°300		
18	-54°323	-25°634			10	-43°062	-15°574					11	-33°300	-49°967			12	-22°855	-56°991		
9	-54°295	-5°035	14	-42°966	-32°076	9	-32°942					-37°703	14	-22°852			-59°467				
11	-54°265	-42°637	65 3135	8.6	9	-42°840	-34°165			65 3142	9.0	11	-32°802	-52°860	65 3148	9.7	9	-22°837	-38°039	65 3153	9.5
9	-53°936	-36°327			9	-42°661	-54°608					15	-32°674	-56°796			11	-22°806	-60°250		
20	-53°296	-11°112			10	-41°739	-12°461					12	-32°567	-28°568			10	-22°728	-50°943		
9	-52°362	-7°907			9	-41°649	-20°205					9	-32°370	-8°882			11	-22°430	-29°975		
9	-52°345	-5°722			12	-41°536	-60°981					10	-32°254	-32°930			10	-22°404	-43°055		
	881		65 3136	8.6		941		65 3143	9.0				1001		65 3149	9.3		1061		65 3154	9.4
9	-51°676	-4°611			12	-41°436	-46°875					9	-32°224	-5°270			10	-21°670	-9°733		
9	-51°558	-48°930			9	-41°402	-55°484					9	-32°220	-47°721			9	-21°651	-37°932		
10	-51°375	-7°081			14	-41°195	-54°801					9	-31°659	-16°659			9	-21°530	-31°971		
9	-51°169	-6°657			12	-41°158	-47°945					9	-31°476	-11°086			15	-21°029	-32°244		
11	-51°019	-28°019	9	-40°307	-20°313	9	-31°179					-15°463	15	-20°803			-59°579				
9	-50°938	-22°073	65 3137	9.4	14	-40°185	-37°679			65 3144	9.0	11	-30°875	-23°324	65 3150	9.4	11	-20°792	-43°777	65 3155	9.5
9	-50°726	-4°058			14	-40°178	-13°662					12	-30°594	-52°752			11	-20°699	-55°949		
12	-50°719	-56°532			10	-40°173	-38°379					9	-30°446	-21°377			9	-20°641	-0°540		
16	-50°682	-2°951			18	-39°849	-64°807					9	-29°837	-36°205			15	-20°470	-30°753		
11	-50°431	-22°625			10	-39°726	-23°835					10	-29°562	-60°417			9	-20°441	-49°420		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1071,					1131,					1191,					1251,			
18	-20.138	-50.221	65 3149	9.4	9	-8.546	-11.160			9	+3.164	-1.532			14	+15.369	-44.291		
11	-20.022	-63.322			12	-8.399	-38.296			9	+3.312	-17.816			9	+15.602	-48.119		
9	-19.783	-64.000			9	-7.190	-34.495			24	+3.372	-30.691	65 3165	8.5	12	+15.912	-41.460		
11	-19.652	-29.219			10	-6.887	-60.916			15	+3.455	-54.351	65 3166	9.6	18	+15.947	-13.640	65 3175	9.0
9	-18.963	-63.022			15	-6.813	-56.970			15	+3.983	-46.242	65 3167	9.6	10	+16.261	-5.208		
9	-18.942	-26.199			14	-6.538	-32.189	65 3156	9.7	11	+4.071	-54.121			15	+16.312	-3.507	64 3308	9.3
9	-18.865	-46.170			11	-6.374	-61.766			11	+4.076	-49.847			10	+16.831	-35.710		
12	-18.780	-8.665			11	-6.262	-10.782			10	+4.389	-42.922			20	+16.954	-37.704	65 3177	9.2
11	-18.729	-39.494			20	-6.050	-13.548	65 3158	9.1	9	+4.411	-11.643			19	+16.981	-36.229	65 3176	9.3
11	-18.692	-31.294			11	-5.994	-50.153			14	+4.540	-47.290			11	+17.421	-14.046		
	1081					1141					1201					1261			
26	-18.321	-31.186	65 3150	8.9	9	-5.884	-22.217			14	+4.859	-24.749			10	+17.565	-23.427		
9	-18.317	-61.202			12	-5.782	-39.297			17	+4.943	-20.335	65 3168	9.3	9	+18.103	-34.375		
9	-18.011	-12.000			19	-5.768	-64.964	65 3157	9.1	9	+5.451	-0.876			10	+18.144	-9.557		
9	-18.004	-55.246			10	-5.303	-31.447			9	+5.482	-3.289			9	+19.452	-32.632		
12	-17.782	-7.880			13	-5.125	-39.397			13	+5.535	-25.227			9	+19.478	-29.823		
9	-17.690	-17.933			18	-5.121	-54.196	65 3159	9.7	9	+5.889	-26.375			9	+19.727	-39.178		
9	-17.150	-53.269			12	-4.858	-44.827			9	+5.910	-9.957			10	+20.128	-13.909		
9	-16.929	-30.645			15	-4.807	-25.944	65 3160	9.6	12	+6.005	-46.985			12	+20.412	-13.474		
9	-16.653	-29.168			9	-4.546	-5.560			18	+6.055	-58.683	65 3169	9.1	9	+20.524	-57.376		
9	-16.639	-13.267			9	-4.352	-56.673			11	+6.437	-9.555			9	+20.538	-6.731		
	1091					1151					1211					1271			
20	-16.547	-45.628	65 3151	9.0	14	-4.203	-53.224			14	+6.459	-49.647			15	+20.899	-43.345		
15	-16.455	-45.654			10	-4.111	-28.741			9	+6.762	-38.347			9	+21.023	-10.183		
15	-16.438	-42.243			18	-4.036	-28.650	65 3161	9.4	10	+7.099	-33.210			9	+21.179	-55.250		
9	-16.257	-42.294			14	-3.719	-41.501			10	+7.544	-16.108			20	+21.184	-10.117	65 3178	9.1
9	-16.052	-38.719			9	-3.569	-48.722			9	+8.043	-46.968			14	+21.326	-52.395		
9	-15.987	-17.535			9	-3.558	-60.630			9	+9.087	-16.476			15	+21.416	-27.907		
9	-15.625	-44.520			9	-3.551	-42.904			9	+9.416	-23.816			9	+21.605	-57.472		
10	-15.469	-43.837			11	-3.521	-3.540			10	+9.540	-42.756			14	+21.623	-21.189		
15	-15.252	-61.859	65 3152	9.4	9	-3.474	-61.425			12	+9.624	-46.281			9	+22.162	-61.630		
9	-15.195	-64.032			12	-2.804	-43.362			15	+9.747	-31.401	65 3170	9.7	9	+22.185	-24.524		
	1101					1161					1221					1281			
10	-15.156	-19.918			9	-2.778	-35.224			9	+10.324	-14.668			10	+22.308	-4.822		
9	-15.126	-58.094			14	-2.510	-57.867			10	+10.403	-29.077			10	+22.421	-40.292		
10	-14.881	-19.233			9	-2.210	-48.600			18	+10.570	-52.083	65 3171	9.2	11	+22.725	-16.559		
24	-14.154	-45.398	65 3153	8.9	9	-2.130	-44.594			9	+10.660	-12.720			9	+23.053	-39.165		
12	-13.938	-45.198			9	-1.830	-31.097			10	+10.899	-27.912			9	+23.142	-47.933		
9	-13.613	-5.468			16	-1.729	-51.619	65 3162	9.4	9	+10.936	-46.523			12	+23.651	-3.440		
15	-13.498	-56.440			9	-0.569	-7.996			9	+11.306	-29.126			10	+23.898	-47.907		
9	-13.342	-35.989			12	-0.542	-22.361	65 3163	9.6	15	+11.343	-23.311	65 3172	9.3	24	+23.938	-27.771	65 3179	8.6
10	-13.337	-22.342			9	-0.379	-2.669			9	+11.556	-30.328			16	+23.989	-27.865		
13	-13.258	-29.663			9	-0.147	-33.216			9	+11.966	-54.599			11	+23.996	-14.186		
	1111					1171					1231					1291			
9	-12.664	-31.315			9	-0.143	-33.229			18	+11.988	-18.056	65 3173	9.2	15	+24.548	-63.382	65 3181	9.6
9	-12.292	-35.874			9	+0.650	-33.272			10	+12.115	-21.895			9	+24.666	-38.646		
9	-11.718	-16.007			9	+0.689	-20.376			18	+12.128	-49.167			15	+24.776	-34.376	65 3180	9.6
18	-11.393	-15.497	65 3155	9.6	11	+0.886	-42.618			9	+12.265	-19.847			9	+24.867	-40.478		
24	-11.372	-51.502	65 3154	9.0	11	+0.944	-46.626			22	+12.312	-14.544	65 3174	8.6	9	+24.952	-32.103		
12	-11.322	-52.022			24	+0.963	-5.743	65 3164	9.0	16	+12.385	-3.147	64 3306	9.3	13	+25.023	-41.530		
10	-11.055	-35.171			9	+1.317	-26.800			12	+12.549	-35.593			10	+25.223	-22.297		
12	-11.040	-49.618			11	+1.318	-34.009			11	+12.646	-45.943			11	+25.375	-43.284		
9	-10.847	-63.513			9	+1.346	-55.523			14	+12.683	-30.617			9	+25.416	-16.712		
9	-10.389	-16.026			9	+1.503	-27.165			9	+13.014	-54.652			9	+25.576	-53.114		
	1121					1181					1241					1301			
9	-10.308	-12.509			11	+1.906	-42.679			12	+13.310	-54.507			10	+25.666	-3.451		
11	-9.837	-50.737			9	+2.051	-64.530			9	+13.655	-6.285			9	+25.702	-13.220		
9	-9.673	-39.105			10	+2.297	-27.577			12	+13.772	-50.013			12	+25.847	-35.367		
9	-9.613	-42.294			14	+2.366	-32.887			14	+13.823	-53.881			9	+26.071	-46.151		
12	-9.280	-46.537			9	+2.389	-43.528			13	+13.876	-52.897			9	+26.172	-44.582		
9	-9.278	-58.802			9	+2.670	-13.189			11	+14.107	-41.357			10	+26.671	-39.219		
10	-8.974	-42.706			14	+2.704	-24.825			9	+14.525	-0.627			12	+26.687	-15.780		
10	-8.954	-60.521			9	+2.852	-44.070			10	+14.563	-38.628			12	+27.131	-63.503		
9	-8.822	-55.958			10	+3.066	-54.252			12	+14.688	-51.270			10	+27.145	-6.223		
9	-8.636	-44.534			9	+3.143	-61.603			9	+14.742	-45.121			9	+27.228	-63.098		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1311,					1371,					1431,					1491,			
9	+27°375	-26°676			12	+38°264	-6°529			12	+48°729	-10°384			9	+62°330	-1°625		
10	+27°5'3	-37°485			9	+38°295	-50°723			9	+49°010	-9°607			10	+62°388	-20°648		
9	+27°553	-35°567			9	+38°570	-47°906			19	+49°184	-13°618	65 3199	9°2	10	+62°559	-33°724		
9	+27°593	-42°844			15	+38°660	-45°705			9	+49°247	-8°587			11	+63°297	-19°931		
9	+27°772	-48°261			9	+38°685	-31°279			9	+49°320	-13°970			9	+63°652	-22°573		
15	+27°892	-30°617	65 3182	9°6	16	+38°852	-35°790			9	+49°418	-10°554			10	+63°760	-20°328		
9	+28°004	-26°295			9	+38°897	-22°867			9	+49°919	-6°565			9	+63°839	-63°039		
9	+28°068	-34°435			9	+39°100	-3°335			11	+49°923	-56°122			9	+63°902	-7°379		
17	+28°120	-17°564	65 3183	9°2	12	+39°443	-32°589			17	+49°970	-5°933	65 3200	9°3	11	+64°642	-35°514		
12	+28°208	-48°750			19	+39°486	-45°494	65 3192	9°4	11	+49°974	-15°242			10	+64°683	-34°295		
	1321					1381					1441					1501			
9	+28°350	-27°783			9	+39°585	-18°220			9	+50°146	-46°206			9	+64°741	-63°310		
10	+28°706	-40°329			9	+39°608	-6°022			9	+50°195	-15°161			19	+64°742	-16°650	65 3210	9°0
9	+28°723	-0°811			11	+39°636	-35°357			9	+50°576	-42°433							
9	+28°752	-32°389			11	+39°647	-36°980			10	+50°823	-23°976							
9	+28°797	-36°786			9	+39°863	-11°346			15	+51°194	-32°626	65 3201	9°6					
20	+28°801	-39°383	65 3184	9°0	15	+39°915	-52°593			9	+51°726	-34°128							
10	+28°907	-37°771			14	+39°925	-47°056			10	+51°799	-20°462							
12	+28°991	-32°867			9	+40°146	-29°795			12	+51°818	-14°183							
14	+29°222	-37°467			10	+40°527	-31°372			9	+51°896	-50°135							
9	+29°433	-58°620			9	+40°527	-5°403			9	+52°022	-51°243							
	1331					1391					1451								
12	+29°754	-28°390			9	+40°554	-25°234			11	+52°085	-17°811							
15	+29°914	-31°527	65 3185	9°6	9	+40°567	-9°724			14	+52°515	-58°720	65 3202	9°6					
15	+30°323	-46°925	65 3187	9°6	9	+40°758	-54°730			10	+52°682	-2°261							
20	+30°355	-11°789	65 3186	9°3	9	+41°150	-41°246			9	+52°797	-37°219							
15	+30°443	-45°392			12	+41°423	-8°175			9	+52°881	-35°442							
9	+30°506	-19°552			20	+41°511	-37°652	65 3193	8°8	9	+53°043	-19°793							
10	+30°546	-23°693			9	+41°550	-3°973			9	+53°450	-33°847							
9	+30°751	-31°147			11	+41°736	-31°568			9	+54°000	-5°177							
9	+31°553	-1°823			9	+41°987	-22°061			9	+54°218	-44°027							
14	+31°622	-60°061			14	+42°114	-53°306			11	+54°292	-4°354							
	1341					1401					1461								
14	+31°910	-35°570			20	+42°897	-23°162	65 3194	9°0	10	+54°352	-63°890							
12	+31°998	-4°381	64 3321	9°7	9	+43°182	-47°745			14	+54°416	-18°167							
9	+32°087	-46°671			9	+43°278	-3°995			11	+54°513	-33°991							
12	+32°225	-40°890			9	+43°352	-5°436			10	+54°530	-9°357							
9	+32°857	-35°643			13	+43°793	-20°851			9	+54°771	-8°693							
14	+33°147	-52°689			9	+43°826	-47°771			15	+54°898	-12°493	65 3203	9°6					
19	+33°390	-40°334	65 3188	9°4	9	+43°853	-10°133			10	+55°640	-11°797							
10	+33°519	-6°911			12	+43°921	-23°524			20	+55°746	-23°726	65 3204	8°9					
9	+34°057	-10°206			10	+43°986	-24°176			9	+56°341	-13°327							
9	+34°237	-45°722			9	+44°474	-38°373			9	+56°374	-22°890							
	1351					1411					1471								
9	+34°469	-45°876			9	+44°505	-15°436			9	+56°434	-18°495							
10	+34°476	-56°530			10	+44°626	-39°741			19	+56°585	-30°234	65 3205	9°3					
11	+34°799	-31°392			9	+44°893	-13°651			10	+57°470	-38°793							
9	+34°819	-3°195			12	+44°910	-27°975	65 3195	9°7	9	+57°607	-8°682							
19	+34°880	-44°780	65 3189	9°7	9	+45°329	-9°665			9	+57°793	-13°075							
19	+35°413	-42°178	65 3190	9°6	19	+45°393	-22°457	65 3196	9°2	14	+57°914	-3°809							
12	+35°731	-13°006			10	+45°419	-28°438			12	+57°982	-16°853							
9	+35°890	-8°461			11	+45°675	-28°391			14	+58°537	-6°312							
12	+36°194	-11°158			9	+45°849	-1°113			10	+58°898	-18°047							
9	+36°474	-4°645			10	+45°898	-29°326			11	+59°164	-31°490							
	1361					1421					1481								
10	+36°622	-38°867			9	+45°978	-43°932			12	+59°289	-8°203							
9	+36°743	-46°626			10	+46°216	-38°121			15	+59°343	-63°743	65 3206	9°3					
12	+37°067	-12°506			9	+46°377	-48°815			11	+59°638	-47°079							
14	+37°200	-62°344			12	+46°750	-40°948			9	+59°690	-48°529							
10	+37°383	-57°968			19	+46°782	-35°911	65 3197	9°4	12	+60°122	-47°568							
9	+37°575	-64°484			9	+46°918	-11°972			14	+60°159	-50°593	65 3207	9°7					
12	+38°032	-46°049			10	+47°618	-57°460			10	+61°196	-21°171							
9	+38°092	-41°624			10	+47°679	-16°146			19	+61°498	-24°982	65 3208	9°1					
14	+38°177	-58°594			22	+48°069	-27°627	65 3198	8°9	14	+62°131	-62°558	65 3209	9°4					
19	+38°230	-60°447	65 3191	9°5	9	+48°601	-46°693			9	+62°170	-3°346							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.
PLATE CENTRE. 16 ^h 3 ^m , - 65°. Plate 333. 1892, July 7. PROVISIONAL CONSTANTS. <i>a</i> = - .01182 <i>d</i> = - .00028 <i>b</i> = + .00017 <i>e</i> = - .01123 <i>c</i> = - .0675 <i>f</i> = + .4884 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																			
10	-64.779	+17.154	64 3348	9.6	9	-49.853	+41.952	64 3363	9.6	9	111.808	+7.732	64 3375	9.6	9	171.416	+16.212	64 3383	9.7
9	-64.344	+8.165			9	-49.725	+3.191			9	-38.394	+39.530			9	-27.347	+41.922		
10	-63.992	+44.269			10	-49.603	+59.711			9	-38.369	+14.399			9	-27.124	+3.348		
9	-63.517	+41.431			9	-49.065	+7.688			11	-38.187	+54.314			9	-26.981	+35.767		
9	-63.236	+10.525			11	-49.051	+52.129			12	-37.731	+18.342			9	-26.785	+59.349		
9	-62.888	+63.132	64 3349	9.2	17	-48.898	+11.709	64 3361	9.3	13	-37.642	+8.918	64 3373	9.6	9	-26.747	+41.877	64 3384	9.1
9	-62.702	+16.567			9	-48.871	+60.144			9	-37.587	+18.493			9	-26.410	+2.168		
9	-61.953	+41.164			19	-48.673	+25.809			9	-37.506	+36.678			9	-26.312	+38.517		
9	-61.864	+44.468			9	-48.639	+25.545			18	-37.432	+28.302			10	-26.301	+43.869		
17	-61.857	+2.952			9	-48.485	+22.087			14	-36.784	+56.116			9	-26.253	+1.784		
18	-61.722	+9.347	64 3350	9.1	15	-48.459	+62.320	63 3785	9.1	9	121.534	+17.169	63 3798	9.4	9	181.138	+0.386	64 3385	8.4
16	-59.922	+50.469			9	-48.285	+60.376			9	-36.326	+62.392			9	-26.135	+29.550		
9	-59.613	+10.334			9	-48.153	+17.892			9	-36.165	+34.166			9	-26.042	+37.367		
11	-59.041	+41.455			9	-47.724	+24.687			9	-35.954	+17.601			9	-25.917	+33.970		
9	-58.717	+11.308			15	-47.718	+25.821			15	-35.647	+62.353			9	-25.812	+0.767		
9	-58.566	+18.090	64 3349	9.2	9	-47.625	+2.358	64 3365	9.6	27	-35.618	+42.376	64 3377	8.5	18	-25.668	+28.420	64 3384	9.1
9	-58.471	+19.698			10	-47.496	+36.863			9	-35.578	+8.564			9	-25.645	+14.316		
9	-58.317	+21.330			9	-46.810	+14.599			10	-35.200	+44.706			9	-25.635	+37.897		
9	-58.159	+36.409			9	-46.676	+62.081			9	-35.045	+21.149			9	-25.626	+28.219		
10	-58.146	+55.661			12	-46.017	+34.114			17	-34.186	+55.773			9	-25.425	+33.246		
9	-57.231	+2.010	64 3353	8.5	9	-45.870	+14.421	64 3370	9.7	18	-34.139	+33.074	64 3379	9.1	9	-25.386	+34.606	63 3805	9.4
9	-56.455	+6.472			9	-45.741	+43.446			9	-33.845	+22.123			9	-25.214	+32.436		
9	-56.423	+11.535			9	-45.631	+53.439			10	-33.561	+12.709			9	-25.191	+3.848		
9	-56.315	+53.183			9	-45.535	+41.972			9	-33.509	+1.766			9	-25.123	+64.709		
25	-55.659	+48.073			9	-45.401	+44.900			9	-33.159	+22.072			9	-25.017	+35.387		
9	-55.439	+10.008	64 3353	8.5	9	-45.248	+19.087	64 3369	8.8	9	-33.111	+17.957	64 3382	9.4	13	-24.784	+59.268	64 3385	8.4
9	-55.422	+15.784			9	-44.798	+50.955			9	-33.036	+52.610			9	-24.564	+33.396		
9	-54.977	+17.152			9	-44.761	+26.398			9	-32.880	+50.435			28	-24.446	+24.537		
9	-54.915	+40.641			9	-44.698	+37.224			9	-32.551	+64.279			9	-24.354	+14.438		
9	-54.761	+13.886			9	-44.382	+18.318			11	-32.521	+62.815			9	-24.309	+19.414		
10	-54.562	+6.128	64 3354	9.2	9	-44.311	+2.742	64 3370	9.7	9	-32.425	+6.186	64 3379	9.1	9	-24.245	+16.345	63 3807	9.3
9	-54.325	+1.770			11	-43.866	+51.717			12	-32.211	+46.978			9	-24.185	+50.682		
9	-54.204	+32.488			9	-43.776	+3.126			9	-32.112	+41.140			10	-24.130	+5.686		
14	-54.030	+54.538			18	-43.435	+12.572			9	-31.992	+39.878			9	-23.936	+14.038		
9	-53.602	+44.630			9	-43.105	+1.311			9	-31.867	+32.712			16	-23.877	+63.547		
15	-53.462	+51.856	64 3355	9.1	20	-43.065	+2.522	64 3369	8.8	9	-31.224	+12.691	64 3381	9.1	9	-23.846	+14.282	64 3387	9.3
9	-52.869	+31.606			9	-42.782	+3.634			9	-31.142	+41.868			9	-23.745	+23.783		
15	-52.447	+49.534			9	-42.181	+10.723			18	-31.090	+36.436			9	-23.185	+41.061		
11	-52.078	+54.355			9	-42.041	+11.140			18	-30.800	+9.996			9	-23.059	+30.675		
9	-52.030	+40.621			9	-41.975	+14.006			9	-30.677	+34.366			9	-22.079	+29.754		
9	-52.011	+2.074	64 3356	9.1	9	-41.970	+15.531	64 3371	9.2	15	-30.637	+13.679	64 3382	9.4	9	-21.964	+54.916	64 3387	9.3
18	-51.869	+10.332			9	-41.810	+59.271			9	-30.604	+50.362			9	-21.798	+62.800		
11	-51.211	+56.442			9	-41.723	+49.536			9	-30.579	+6.634			9	-21.543	+40.709		
9	-50.787	+1.375			9	-41.668	+9.448			9	-30.538	+43.552			9	-21.356	+57.985		
9	-50.745	+40.626			15	-41.548	+16.126			9	-30.436	+26.228			9	-21.175	+26.447		
9	-50.687	+19.229	64 3359	9.3	9	-40.982	+59.507	64 3371	9.2	10	-30.376	+20.475	64 3381	9.1	9	-21.101	+20.980	64 3387	9.3
12	-50.270	+43.815			9	-40.887	+21.373			9	-30.251	+56.350			9	-21.083	+30.610		
9	-50.066	+12.530			9	-40.829	+19.445			10	-30.178	+38.961			11	-21.075	+23.941		
9	-49.929	+17.685			40	-40.695	+26.598			9	-29.428	+11.129			9	-21.054	+50.360		
17	-49.871	+8.164			9	-40.306	+49.669			9	-29.344	+3.017			9	-20.941	+52.696		
101																			
9	-52.011	+2.074	64 3356	9.1	9	-39.788	+55.712	64 3371	9.2	9	-29.303	+36.607	64 3382	9.4	9	-20.391	+55.451	64 3387	9.3
18	-51.869	+10.332			9	-39.558	+33.073			11	-29.143	+49.477			9	-20.348	+22.049		
11	-51.211	+56.442			9	-39.550	+41.745			10	-28.791	+39.660			9	-20.187	+8.266		
9	-50.787	+1.375			13	-39.256	+56.482			13	-28.596	+19.429			9	-20.181	+61.203		
9	-50.745	+40.626			9	-39.247	+21.813			9	-28.328	+39.210			9	-20.159	+38.935		
9	-50.687	+19.229	64 3360	9.6	9	-39.147	+13.728	64 3371	9.2	9	-27.951	+41.915	64 3382	9.4	9	-20.129	+43.211	64 3387	9.3
12	-50.270	+43.815			9	-39.064	+47.600			9	-27.850	+34.064			9	-19.816	+36.455		
9	-50.066	+12.530			9	-39.064	+53.581			9	-27.466	+16.728			15	-19.526	+15.930		
9	-49.929	+17.685			9	-38.990	+7.564			9	-27.445	+42.161			10	-19.501	+26.922		
17	-49.871	+8.164			9	-38.904	+33.646			9	-27.418	+51.316			9	-19.485	+61.214		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
9	231,		64 3388	9.7	9	291,		63 3822	8.3	22	351,		64 3406	8.6	9	411,		64 3414	9.7
10	-19.437	+37.274			9	-9.924	+32.434			9	-0.570	+37.958			9	+8.713	+3.656		
11	-19.234	+12.243			9	-9.902	+57.124			9	-0.500	+15.821			9	+9.112	+64.220		
9	-19.185	+41.286			9	-9.870	+19.009			16	-0.133	+3.814			9	+9.289	+43.337		
9	-19.167	+23.117			9	-9.755	+21.649			9	-0.060	+29.896			9	+9.526	+58.725		
9	-19.117	+61.552			36	-9.422	+60.984			9	-0.030	+1.648			9	+9.607	+22.735		
22	-18.561	+5.889	64 3389	9.0	9	-9.182	+11.411			9	+0.258	+0.194			9	+9.699	+6.110		
10	-18.430	+32.171			9	-9.084	+37.432			9	+0.575	+34.357			9	+9.760	+36.054		
15	-18.059	+50.598			9	-8.880	+34.175			15	+0.698	+13.424	64 3408	9.3	9	+9.770	+11.364		
12	-18.025	+62.976	63 3814	9.7	9	-8.748	+44.138			9	+1.100	+20.903			10	+9.806	+32.255		
9	-17.949	+16.682			20	-8.733	+47.973	64 3394	8.8	9	+1.101	+2.673			9	+9.860	+17.465		
	241					301					361					421			
9	-17.880	+12.162			9	-8.484	+24.922			9	+1.396	+26.030			9	+9.935	+57.457		
10	-17.831	+34.308			9	-8.326	+4.850			9	+1.532	+7.356			9	+9.938	+43.672		
9	-17.746	+36.763			12	-8.092	+2.580	64 3395	9.6	18	+2.200	+63.777	63 3836	9.1	9	+9.943	+2.575		
9	-17.383	+20.987			10	-7.936	+26.768			9	+2.274	+21.591			9	+10.146	+60.606		
10	-17.348	+51.898			10	-7.873	+19.395	64 3396	9.7	19	+2.360	+47.644	64 3409	9.1	9	+10.211	+42.530		
10	-17.079	+18.411			9	-7.798	+29.044			9	+2.566	+35.085			9	+10.342	+21.479		
9	-16.879	+59.543			9	-7.690	+22.889			9	+2.634	+23.515			9	+10.699	+53.730		
9	-16.516	+7.300			9	-7.662	+29.802			9	+2.636	+55.759			9	+10.822	+21.432		
18	-16.033	+57.564	63 3816	9.2	9	-7.174	+7.076			16	+2.830	+9.880	64 3410	9.2	9	+10.934	+37.456		
10	-16.033	+52.752			9	-7.034	+4.606			9	+2.920	+56.581			9	+11.083	+43.482		
	251					311					371					431			
9	-16.001	+64.162			14	-7.028	+51.217	64 3397	9.6	9	+2.948	+36.442			9	+11.385	+28.299		
9	-15.985	+42.000			9	-6.818	+58.636			9	+3.230	+10.768			9	+11.432	+37.993		
9	-15.947	+24.171			9	-6.452	+54.742			9	+3.601	+2.096			9	+11.645	+4.572		
9	-15.827	+17.196			10	-6.436	+3.310	64 3398	9.7	9	+3.638	+30.903			9	+11.650	+26.851		
9	-15.768	+51.988			9	-6.163	+19.076			9	+3.892	+44.612			9	+11.730	+42.044		
9	-15.669	+8.876			9	-5.994	+23.293			9	+4.060	+53.558			10	+11.995	+59.423		
9	-15.645	+47.032			9	-5.952	+60.324			9	+4.258	+25.967			10	+12.279	+25.489		
9	-15.199	+44.673			12	-5.622	+9.376	64 3399	9.5	9	+4.278	+13.848			9	+12.355	+17.653		
9	-14.654	+40.151			9	-5.220	+33.086			10	+4.390	+55.852			9	+12.433	+37.428		
9	-14.418	+63.183			9	-5.058	+42.725			9	+4.415	+24.826			9	+12.527	+58.646		
	261					321					381					441			
9	-14.297	+52.214			9	-4.844	+29.506			9	+4.620	+39.266			9	+12.533	+45.377		
9	-14.259	+50.997			9	-4.796	+13.787			9	+4.643	+12.365			9	+13.007	+8.884		
9	-14.236	+5.198			9	-4.768	+42.155			9	+4.674	+11.042			9	+13.041	+43.402		
9	-13.995	+27.390			9	-4.525	+42.063			20	+5.379	+42.782	64 3411	9.0	9	+13.084	+47.066		
9	-13.980	+64.133			9	-4.238	+27.866			10	+5.626	+17.971			9	+13.213	+25.685		
9	-13.900	+30.353			9	-4.234	+5.632			9	+5.659	+61.252			12	+13.293	+40.916		
9	-13.854	+24.175			9	-4.167	+26.454			9	+5.720	+44.456			9	+13.533	+14.729		
9	-13.822	+4.847			10	-3.814	+54.605			9	+5.948	+6.440			9	+13.607	+34.016		
19	-13.742	+40.257	64 3390	9.1	9	-3.795	+53.530			10	+6.134	+26.228			9	+13.803	+60.264		
15	-13.613	+52.904	64 3391	9.5	10	-3.786	+8.374	64 3400	9.6	10	+6.326	+37.963			9	+13.840	+46.559		
	271					331					391					451			
9	-13.458	+22.209			11	-3.330	+35.325	64 3401	9.6	9	+6.329	+19.395			11	+13.869	+15.665		
9	-13.314	+39.255			9	-3.210	+24.387			10	+6.498	+31.080			9	+13.941	+49.185		
9	-12.765	+7.283			11	-3.208	+58.629	63 3830	9.6	9	+6.515	+38.858			9	+14.015	+45.599		
9	-12.724	+29.110			22	-2.965	+43.133	64 3402	9.0	9	+6.616	+13.890			9	+14.305	+36.536		
9	-12.502	+15.229			19	-2.882	+45.300	64 3403	9.2	9	+6.756	+19.445			9	+14.378	+11.649		
9	-12.281	+40.996			15	-2.834	+59.499	63 3831	9.3	9	+7.177	+52.037			9	+15.589	+49.002		
9	-12.112	+19.093			9	-2.808	+38.009			9	+7.203	+23.031			9	+15.701	+55.491		
10	-11.995	+48.609			9	-2.731	+7.643			9	+7.227	+55.953			9	+15.840	+38.002		
9	-11.920	+53.494			9	-2.450	+13.329			9	+7.238	+9.680			9	+16.007	+59.307		
15	-11.250	+54.391	64 3392	9.4	10	-2.396	+28.738	64 3404	9.7	44	+7.528	+16.146	64 3412	7.8	9	+16.077	+36.961		
	281					341					401					461			
9	-11.032	+21.908			9	-2.078	+41.704			9	+7.758	+28.820			9	+16.099	+15.721		
10	-10.966	+48.232			9	-1.853	+48.066			9	+7.868	+39.438			9	+16.173	+0.442		
9	-10.874	+43.112			9	-1.725	+41.160			10	+8.243	+58.800			9	+16.353	+10.899		
9	-10.735	+53.410			9	-1.536	+63.638			9	+8.254	+7.170			9	+16.429	+28.301		
10	-10.532	+2.436			9	-1.504	+18.337			9	+8.307	+37.923			9	+16.434	+55.301		
9	-10.452	+20.126			9	-1.436	+46.118			21	+8.315	+58.651	63 3843	8.8	9	+16.551	+31.809		
10	-10.200	+47.152			9	-1.317	+58.287			9	+8.421	+53.507			9	+16.756	+10.451		
9	-10.184	+56.827			9	-1.248	+48.256			11	+8.508	+55.123	64 3413	9.7	9	+17.079	+31.095		
9	-10.018	+22.633			12	-1.232	+28.542	64 3405	9.6	9	+8.617	+59.409			9	+17.120	+61.390		
11	-9.948	+25.024	64 3393	9.6	9	-0.708	+62.164			10	+8.622	+41.416			9	+17.121	+26.595		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471,					531,					591,					651,			
10	+17°353	+39°107	64 3410	8·7	11	+30°811	+40°618	64 3427	9·1	9	+42°641	+59°899	64 3436	9·1	10	+54°541	+33°264	64 3450	8·6
0	+17°431	+15°083			9	+30°951	+7°803			9	+42°920	+41°080			9	+55°381	+22°068		
21	+17°886	+8°847			9	+31°061	+5°278			9	+42°964	+63°998			20	+55°761	+39°883		
0	+17°943	+18°616			17	+31°245	+40°111			10	+43°060	+45°245			9	+56°010	+4°370		
10	+18°502	+22°878			0	+31°340	+32°533			9	+43°094	+0°846			9	+56°107	+5°778		
0	+19°101	+53°184	64 3417	9·0	15	+31°397	+20°757	64 3428	9·3	9	+43°260	+55°258	64 3436	9·1	9	+56°166	+31°214	64 3451	9·1
13	+19°312	+44°434			0	+31°589	+5°881			9	+43°695	+10°451			9	+56°458	+53°412		
0	+19°420	+2°802			9	+31°617	+64°156			9	+43°723	+22°562			9	+56°495	+32°926		
0	+19°799	+23°525			9	+31°630	+6°009			20	+43°746	+12°516			9	+56°950	+44°670		
12	+19°885	+30°439			9	+31°745	+44°180			9	+44°235	+14°299			9	+57°295	+21°002		
0	481		64 3418	9·7	9	541		64 3430	9·7	9	601		64 3437	9·4	9	661		64 3452	9·3
0	+19°958	+44°898			9	+31°837	+45°859			9	+44°296	+34°908			9	+57°312	+5°868		
10	+20°203	+13°342			0	+32°042	+48°340			9	+44°555	+15°749			20	+57°371	+13°964		
0	+20°359	+49°690			9	+32°798	+16°451			9	+44°660	+21°720			9	+57°733	+15°862		
10	+20°528	+61°704			11	+32°843	+1°229			9	+45°103	+5°205			9	+57°925	+32°072		
0	+21°070	+61°204			11	+32°976	+48°193			9	+45°182	+8°356			9	+58°173	+39°123		
0	+21°659	+30°517	64 3420	9·0	18	+33°041	+25°562	64 3429	9·1	11	+45°515	+34°636	64 3438	7·9	9	+58°464	+3°472	64 3454	9·1
0	+21°847	+10°510			0	+33°059	+32°051			18	+45°997	+39°971			9	+58°488	+50°172		
0	+22°071	+4°343			0	+33°585	+20°541			22	+46°011	+39°911			11	+58°581	+44°883		
0	+22°235	+11°951			0	+34°234	+55°333			9	+46°082	+30°676			14	+58°836	+53°487		
0	+22°400	+23°257			0	+34°320	+18°113			9	+46°107	+36°324			9	+59°072	+8°214		
11	491		64 3419	9·7	9	551		63 3867	8·9	19	611		64 3439	9·2	9	671		64 3455	9·6
0	+22°418	+40°180			9	+34°876	+54°729			9	+46°382	+23°383			9	+59°245	+28°660		
0	+22°470	+8°921			22	+35°066	+56°191			9	+46°811	+16°023			9	+59°345	+44°639		
0	+22°522	+22°225			10	+35°139	+3°861			9	+47°099	+43°407			9	+59°444	+55°468		
0	+22°777	+23°401			9	+35°541	+9°056			9	+47°331	+20°785			16	+59°916	+16°532		
0	+23°020	+35°558			9	+35°545	+13°745			17	+47°422	+14°721			9	+60°073	+12°360		
0	+23°067	+47°979	64 3422	9·0	21	+36°039	+51°410	64 3431	8·6	12	+47°516	+45°198	64 3440	9·7	9	+60°397	+41°054	64 3456	9·2
0	+23°209	+22°281			9	+36°400	+5°949			9	+47°912	+49°798			9	+60°779	+54°482		
15	+23°604	+25°363			10	+36°593	+56°087			9	+48°017	+41°109			9	+60°785	+6°211		
9	+23°794	+25°475			10	+36°716	+4°681			10	+48°059	+42°704			9	+61°168	+43°986		
9	+23°896	+58°189			9	+36°763	+1°195			9	+48°395	+47°142			10	+61°434	+18°034		
9	501		64 3423	9·1	9	561		63 3869	9·7	9	621		64 3441	9·3	15	681		64 3457	9·2
0	+24°188	+28°637			9	+36°929	+27°571			9	+48°414	+47°578			13	+62°285	+59°153		
10	+24°419	+31°741			10	+36°933	+64°740			9	+48°464	+63°335			9	+62°621	+16°417		
20	+24°853	+55°135			12	+37°161	+49°589			9	+48°782	+55°972			9	+63°225	+56°069		
9	+24°901	+59°266			9	+37°589	+29°641			9	+48°874	+4°637			9	+64°210	+2°829		
9	+25°137	+48°441			22	+37°591	+15°357			9	+49°068	+18°561			17	+64°287	+49°096		
0	+25°625	+2°420	64 3424	9·1	9	+37°883	+37°898	64 3433	9·6	9	+49°589	+52°005	64 3442	6·8	10	+64°505	+29°504	64 3460	9·6
0	+25°633	+4°469			13	+38°165	+48°581			10	+50°267	+15°556			9	+64°526	+16°164		
0	+25°741	+13°031			14	+38°533	+49°456			48	+50°503	+35°031			9	+63°053	+24°803		
19	+26°093	+9°660			9	+38°604	+13°153			9	+50°779	+18°846			10	+62°761	+14°975		
9	+26°283	+63°857			9	+38°613	+17°821			18	+50°801	+36°412			9	+62°739	+3°016		
10	511		63 3858	8·9	9	571		64 3432	8·5	9	631		64 3443	9·7	9	691		64 3458	9·2
0	+26°389	+4°892			9	+38°940	+8°376			9	+49°589	+52°005			9	+62°739	+3°016		
21	+26°840	+59°487			9	+39°140	+2°954			10	+50°267	+15°556			9	+62°344	+21°247		
9	+26°879	+55°927			9	+39°365	+15°506			48	+50°503	+35°031			10	+62°227	+18°578		
9	+26°887	+54°300			20	+39°956	+22°549			10	+51°581	+48°698			9	+62°621	+16°417		
12	+27°029	+64°930	63 3859	9·0	9	+40°558	+40°209	64 3435	9·0	16	+51°849	+55°308	64 3445	9·2	12	+62°075	+33°425	65 3201	9·6
					9	+40°558	+40°209			20	+51°984	+21°704	64 3447	8·7	9	+61°990	+43°227		
10	+27°069	+53°084	64 3425	9·2	9	+40°679	+27°185	63 3875	9·7	10	+52°038	+54°231	64 3446	8·4	9	+61°683	+56°936	64 3461	9·6
9	+28°127	+26°549			9	+40°874	+30°923			28	+52°335	+44°057			9	+61°236	+5°824		
18	+28°225	+41°560			9	+40°962	+43°860			9	+52°341	+58°600			9	+61°125	+20°473		
9	+28°415	+53°456			9	+41°032	+43°144			15	+52°447	+33°304			9	+60°985	+4°983		
9	+28°478	+11°131			9	+41°079	+8°748			9	+52°493	+36°807			9	+60°398	+9°967		
9	521		63 3864	9·1	9	581		63 3876	9·3	9	641		63 3883	9·1	9	701		65 3203	9·6
9	+29°449	+4°231			9	+41°125	+14°312			9	+52°545	+9°402			9	+60°226	+9°260		
9	+29°646	+34°078			9	+41°406	+29°058			16	+52°551	+62°465			9	+60°195	+36°120		
9	+29°943	+5°233			9	+41°602	+49°542			9	+52°761	+52°362			13	+59°893	+18°756		
10	+29°963	+43°387			11	+41°746	+56°188			9	+52°792	+26°562			14	+59°818	+13°075		
16	+30°284	+62°512			9	+41°827	+14°025			19	+53°188	+50°690			9	+59°112	+12°315		
9	+30°373	+57°564			13	+42°026	+56°188			9	+53°501	+17°624			10	+58°913	+59°363		
9	+30°537	+48°458			9	+42°108	+6°335			9	+53°512	+36°179			9	+58°661	+34°531		
9	+30°738	+27°466			9	+42°200	+28°242			9	+53°729	+4°901			9	+58°320	+13°815		
9	+30°753	+58°127			9	+42°274	+28°678			9	+53°917	+58°348			9	+58°238	+44°559		
9	+30°782	+19°567			10	+42°534	+19°417			9	+54°499	+6°729			23	+58°177	+24°207	65 3204	8·9

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	711,					771,					831,					891,			
9	-57°614	-23°333			9	-44°075	-6°751			13	-32°513	-46°082			10	-22°044	-9°688		
12	-57°421	-4°192			9	-44°010	-19°364			12	-32°210	-46°318			9	-21°920	-40°463		
9	-57°386	-9°072			9	-43°951	-24°418			9	-32°118	-19°260			11	-21°834	-64°813		
9	-56°882	-13°445			18	-43°802	-0°314	64 3367	9°3	9	-32°036	-11°530			9	-21°454	-8°627		
18	-56°873	-30°641	65 3205	9°3	19	-43°608	-13°593	65 3215	9°3	13	-31°766	-59°721			9	-21°065	-32°335		
10	-56°726	-64°383			13	-43°376	-16°398	65 3216	9°4	9	-31°748	-9°218			9	-21°006	-64°864		
10	-56°618	-6°640			12	-43°279	-16°306			9	-31°731	-57°543			9	-20°845	-4°669		
9	-56°549	-37°260			11	-43°116	-42°742			9	-31°691	-13°502			11	-20°756	-19°685		
13	-56°432	-17°190			11	-43°104	-42°898	65 3214	9°6	9	-31°643	-27°750			11	-20°700	-7°003		
10	-55°742	-8°466			9	-43°078	-35°192			12	-31°554	-4°534			10	-20°319	-32°237		
	721					781					841					901			
9	-55°442	-18°319			12	-42°986	-54°510	65 3213	9°4	36	-31°527	-58°033	65 3222	8°5	10	-20°284	-59°281		
9	-55°387	-39°122			9	-42°970	-19°993			10	-31°272	-0°613			10	-19°863	-17°587		
9	-54°212	-31°711			9	-42°915	-16°854			9	-31°210	-27°702			17	-19°485	-36°440	65 3227	9°6
9	-53°857	-9°884			16	-42°860	-33°233			17	-30°832	-8°155	65 3223	9°6	12	-19°466	-51°732		
10	-52°930	-21°272			9	-42°640	-58°558			9	-30°745	-3°635			14	-19°409	-27°487		
10	-52°634	-47°224			9	-42°323	-28°279			11	-30°214	-7°447			10	-19°097	-38°460		
9	-52°453	-48°666			19	-42°024	-51°273	65 3217	9°4	10	-29°909	-56°427			10	-18°885	-5°106		
20	-52°358	-25°039	65 3208	9°1	9	-42°017	-9°739			11	-29°709	-25°071			9	-18°761	-61°884		
11	-52°113	-47°682			10	-41°905	-25°929			11	-29°490	-63°471			9	-18°406	-39°618		
11	-51°881	-50°670	65 3207	9°7	9	-41°874	-34°606			9	-29°368	-26°137			9	-18°125	-3°975		
	731					791					851					911			
9	-51°772	-20°681			10	-41°705	-1°438			10	-29°240	-17°626			11	-17°871	-16°290		
14	-51°738	-63°878	65 3206	9°3	24	-41°592	-16°076	65 3218	8°8	9	-29°226	-57°401			13	-17°705	-46°611		
9	-51°641	-8°870			9	-41°430	-64°614			9	-29°217	-61°770			9	-17°430	-22°768		
11	-50°916	-19°894			9	-40°892	-51°540			20	-28°801	-31°169	65 3224	9°0	9	-17°419	-19°528		
9	-50°666	-33°705			9	-40°754	-50°494			9	-28°244	-57°039			16	-17°353	-37°726	65 3228	9°6
9	-50°428	-20°252			9	-40°736	-33°108			9	-28°160	-26°207			9	-17°097	-47°378		
9	-50°376	-22°486			9	-40°500	-11°719			11	-28°119	-61°770			9	-16°781	-47°494		
22	-49°709	-16°497	65 3210	9°0	11	-40°397	-7°435			9	-28°020	-25°802			9	-16°601	-49°116		
13	-49°036	-62°503	65 3209	9°4	9	-40°378	-14°082			9	-28°006	-58°679			9	-16°545	-10°407		
9	-48°730	-5°468			10	-40°018	-33°283			12	-27°938	-42°728			19	-16°470	-15°516	65 3229	9°2
	741					801					861					921			
9	-48°518	-34°123			9	-39°696	-38°765			9	-27°923	-60°724			9	-16°223	-63°404		
11	-48°462	-35°322			9	-39°398	-23°460			10	-27°166	-6°493			9	-16°011	-42°812		
9	-48°390	-17°894			15	-38°732	-1°022			14	-27°071	-48°764			9	-15°893	-53°634		
9	-48°321	-2°010			9	-38°652	-33°843			23	-26°886	-54°999	65 3225	9°0	28	-15°518	-54°675	65 3230	8°8
14	-48°177	-24°669			9	-38°392	-43°096			9	-26°643	-16°439			9	-15°509	-21°327		
9	-48°115	-18°804			10	-38°269	-3°514			14	-26°188	-13°260			10	-14°610	-9°926		
11	-48°047	-35°462			10	-38°094	-24°494			9	-26°138	-51°483			9	-14°562	-10°279		
10	-47°413	-4°106			18	-38°084	-20°648	65 3219	9°3	14	-25°974	-7°327			27	-14°491	-39°440	65 3231	8°5
9	-47°290	-62°843			9	-38°056	-33°977			10	-25°912	-17°152			18	-14°416	-30°097	65 3232	9°3
9	-47°159	-24°864			9	-37°950	-22°560			10	-25°528	-13°571			9	-14°295	-13°779		
	751					811					871					931			
9	-47°112	-17°770			17	-37°849	-3°534	64 3372	9°5	9	-25°514	-26°359			9	-14°212	-35°200		
9	-46°963	-53°681			11	-37°312	-51°342			11	-25°478	-8°213			22	-14°169	-16°359	65 3233	9°0
44	-46°772	-36°440	65 3212	7°8	9	-37°222	-23°423			9	-25°255	-60°124			9	-13°734	-38°835		
17	-46°584	-49°664	65 3211	9°3	10	-37°106	-44°752			9	-24°988	-53°463			9	-13°606	-11°307		
9	-46°416	-63°013			19	-36°642	-31°451	65 3220	9°2	12	-24°793	-23°533			13	-13°130	-59°497	65 3234	9°7
12	-46°145	-13°380			11	-35°987	-3°268			9	-24°202	-56°489			9	-13°038	-17°652		
10	-45°953	-2°192			9	-35°768	-32°795			9	-24°050	-46°632			9	-12°668	-9°336		
9	-45°845	-0°174			10	-35°670	-11°266			9	-23°944	-9°889			9	-12°621	-1°924		
9	-45°641	-6°310			9	-35°288	-12°399			16	-23°930	-11°355	65 3226	9°7	9	-12°547	-55°746		
10	-45°640	-31°849			10	-34°658	-11°721			9	-23°225	-3°277			9	-12°317	-25°923		
	761					821					881					941			
10	-45°532	-5°234			9	-34°641	-33°257			10	-23°157	-44°241			9	-11°240	-43°426		
9	-45°454	-32°379			10	-34°604	-26°965			10	-23°065	-25°177			9	-10°896	-18°221		
12	-45°224	-39°336			9	-34°268	-25°415			9	-22°811	-2°273			11	-10°867	-28°941		
10	-44°846	-35°358			9	-33°977	-42°797			9	-22°640	-29°595			9	-10°416	-11°959		
9	-44°612	-31°620			10	-33°528	-8°831			9	-22°602	-48°570			9	-9°912	-59°833		
9	-44°502	-53°878			20	-33°166	-63°390	65 3221	9°2	20	-22°462	-2°681	64 3386	8°9	11	-9°884	-25°963		
9	-44°327	-39°431			9	-32°854	-15°792			18	-22°403	-2°725			10	-9°396	-46°416		
9	-44°195	-4°576			9	-32°841	-2°312			10	-22°228	-17°456			20	-9°345	-32°451	65 3235	9°1
9	-44°193	-3°986			9	-32°540	-23°778			9	-22°224	-36°706			9	-8°994	-46°560		
10	-44°079	-47°342			9	-32°530	-2°148			9	-22°210	-38°242			14	-8°884	-20°860		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	951					1011					1071					1131			
10	- 8'786	-38'370			9	+ 5'882	-39'629			9	+16'213	-50'137			13	+25'232	-33'637		
11	- 8'690	- 7'938			10	+ 6'165	-15'968			9	+16'537	-42'384			11	+25'260	-56'367		
9	- 8'188	- 0'152			9	+ 6'379	-21'473			9	+16'989	-25'871			9	+25'451	-24'453		
9	- 7'561	-43'326			10	+ 6'850	- 9'746			11	+17'127	-24'807			10	+25'457	-60'426		
18	- 7'417	- 5'048	65 3236	9'1	9	+ 7'231	-33'545			9	+17'369	-47'190			9	+25'519	- 2'738		
9	- 7'123	-50'604			19	+ 7'252	-29'903	65 3244	9'4	9	+17'407	-19'040			20	+25'736	-50'379	65 3261	9'1
9	- 6'815	- 7'002			9	+ 7'487	-26'743			9	+17'489	- 9'684			14	+26'275	-42'732		
19	- 6'623	- 5'962	65 3237	9'1	18	+ 7'616	-30'137	65 3245	9'3	9	+17'590	-63'031			10	+26'442	-42'146		
9	- 6'120	-36'001			9	+ 7'663	-59'390			9	+17'883	-21'173			14	+26'683	-10'552		
15	- 5'936	-27'894	65 3238	9'7	9	+ 7'999	-14'798			15	+18'283	-44'320	65 3254	9'7	14	+27'222	-30'595		
	961					1021					1081					1141			
10	- 5'783	-13'562			26	+ 8'004	-49'266	65 3247	8'8	9	+18'323	-47'422			9	+27'501	-20'981		
10	- 5'693	-10'466			13	+ 8'037	- 8'062	65 3246	9'6	9	+18'421	-45'338			10	+27'551	-63'473		
9	- 5'667	-57'841			9	+ 8'067	- 7'284			10	+18'456	-42'138			10	+28'407	- 4'940		
25	- 5'661	- 6'184	65 3239	9'0	14	+ 8'557	- 1'318			9	+18'785	-59'169			9	+28'421	-13'428		
12	- 5'480	-15'606			18	+ 9'080	-40'654	65 3248	9'3	13	+19'399	-52'160			9	+28'549	- 1'392		
10	- 5'182	-21'365			12	+ 9'102	-11'428			11	+19'559	-25'563			9	+28'605	-31'593		
9	- 5'136	-14'288			9	+ 9'196	-38'117			18	+19'663	-19'757	65 3255	9'4	13	+28'726	-25'397		
9	- 4'954	-21'182			9	+ 9'486	-26'747			9	+19'783	-49'666			9	+28'855	-12'895		
10	- 4'320	-32'511			18	+ 9'528	-14'241	65 3249	9'3	16	+19'785	-10'510	65 3256	9'7	9	+28'990	- 7'064		
9	- 4'318	- 5'016			9	+ 9'733	-38'683			9	+19'805	-49'022			13	+29'032	-34'008		
	971					1031					1091					1151			
9	- 3'684	-59'501			9	+ 9'878	-30'360			10	+20'031	- 2'270			16	+29'343	- 8'889	65 3262	9'6
9	- 2'983	- 3'661			32	+ 9'938	-54'055	65 3250	8'5	11	+20'216	-10'349			31	+29'414	- 3'958	64 3426	8'6
9	- 2'627	-61'282			9	+10'056	-29'518			9	+20'254	-28'556			12	+29'537	-52'195		
9	- 2'612	-14'394			10	+10'209	-21'418			10	+20'275	- 3'940			9	+29'849	-39'382		
9	- 2'128	- 1'555			17	+10'224	-49'020	65 3251	9'6	9	+20'460	-53'217			9	+30'195	-21'283		
10	- 2'106	-28'868			15	+10'238	-51'644			10	+20'489	- 5'282			9	+30'273	-10'219		
18	- 1'977	-37'918	65 3240	9'4	12	+10'395	-40'109			9	+20'653	-24'183			12	+30'358	-61'493		
10	- 1'719	-21'592			10	+10'452	-25'557			9	+20'775	-21'311			9	+30'541	- 5'784		
9	- 1'551	-51'301			9	+10'454	-37'776			9	+20'801	- 1'140			9	+30'638	-63'755		
9	- 1'402	-13'606			9	+10'935	-13'636			9	+21'035	-22'059			10	+30'805	-52'179		
	981					1041					1101					1161			
10	- 0'896	-44'744			10	+11'014	-34'067			9	+21'196	-13'311			9	+30'807	-53'081		
9	- 0'771	-58'585			9	+11'092	-39'435			13	+21'238	- 1'026			9	+31'195	-43'483		
24	- 0'203	- 6'612	65 3241	8'8	16	+11'326	-47'716	65 3252	9'7	9	+21'433	- 3'970			15	+31'217	-20'270	65 3263	9'7
10	- 0'084	-20'967			11	+11'409	-50'643			24	+21'515	-59'715	65 3257	9'0	10	+31'367	- 3'128		
9	+ 0'141	-48'118			9	+11'511	-50'550			9	+21'536	-25'606			9	+31'552	-33'360		
9	+ 0'142	-25'473			10	+11'646	-26'153			14	+21'780	-42'936	65 3258	9'7	10	+31'814	-34'193		
14	+ 0'418	-14'574			9	+11'788	-25'703			9	+21'833	-57'075			9	+32'612	-42'682		
9	+ 0'920	-49'253			14	+12'145	-23'023			15	+21'898	-40'629			9	+32'983	-55'972		
9	+ 0'996	-41'304			9	+12'180	-12'114			9	+22'007	-35'990			9	+33'315	-37'754		
9	+ 1'523	-64'525			9	+12'193	-51'448			10	+22'173	-57'517			9	+33'520	-12'440		
	991					1051					1111					1171			
9	+ 1'858	- 7'752			9	+12'279	-54'242			10	+22'511	- 9'283			9	+33'851	- 6'188		
14	+ 1'930	-20'215			9	+12'314	-36'706			9	+22'910	-63'052			9	+33'863	-51'757		
9	+ 2'024	-42'453			10	+12'317	-55'899			9	+23'041	-34'229			9	+34'009	- 4'424		
10	+ 2'034	-28'081			9	+12'765	-56'435			9	+23'135	-48'573			15	+34'215	-23'281	65 3264	9'7
10	+ 2'116	-31'215			9	+12'879	- 1'286			11	+23'218	-27'790			11	+35'415	-42'298		
9	+ 2'146	-39'102			9	+12'920	-38'264			17	+23'239	- 0'791	64 3421	9'6	9	+35'450	- 4'174		
11	+ 2'514	-29'869			12	+13'143	-51'430			11	+23'547	-18'023			10	+35'461	- 5'580		
18	+ 2'722	-49'475	65 3242	9'4	28	+13'359	-53'519	65 3253	8'9	9	+23'678	-28'922			9	+35'735	-31'312		
10	+ 2'792	-20'401			11	+13'375	-36'195			12	+23'745	-33'853			9	+36'200	- 5'440		
9	+ 2'925	- 9'862			9	+13'899	-40'734			17	+23'829	-54'643	65 3259	9'6	9	+36'282	-17'059		
	1001					1061					1121					1181			
10	+ 3'189	-26'517			9	+13'997	- 8'374			9	+23'913	-49'948			9	+36'385	- 6'946		
9	+ 3'364	-29'601			9	+14'004	-14'098			9	+24'071	-14'051			9	+36'479	-23'305		
9	+ 3'906	-48'576			12	+14'050	-14'277			10	+24'195	-37'864			10	+36'487	-24'865		
9	+ 4'213	-57'498			9	+14'820	-58'814			9	+24'243	- 1'574			9	+36'565	-23'581		
9	+ 4'389	- 9'082			16	+15'021	- 0'062	64 3415	9'3	9	+24'408	-26'289			9	+36'891	-40'221		
9	+ 4'798	-21'891			10	+15'305	- 8'095			9	+24'715	-36'033			9	+36'979	-16'627		
13	+ 5'185	-49'498			9	+15'469	- 8'130			11	+24'805	- 5'930			9	+37'133	-44'584		
11	+ 5'337	- 9'061			9	+15'988	-31'299			10	+24'827	-15'153			9	+37'154	-33'347		
21	+ 5'390	-27'727	65 3243	9'2	9	+16'047	-62'420			12	+24'861	- 6'596			13	+37'432	- 8'202		
9	+ 5'626	-31'911			9	+16'091	-38'653			18	+24'893	-63'698	65 3260	9'3	9	+37'695	-49'982		

C.P.D.					G.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
	1191,					1251,					PLATE CENTRE.						51,			
9	+37.752	-16.734			9	+50.753	-5.855				16h 21m, - 65°.					9	-46.887	+26.500		
10	+37.983	-44.174			9	+50.776	-24.428				Plate 1013. 1894, June 29.					9	-46.791	+46.476		
9	+38.093	-8.884			10	+50.802	-44.316				PROVISIONAL CONSTANTS.					9	-46.677	+49.526		
9	+38.470	-57.076			10	+50.887	-45.623				a = - .01143	d = - .00015			16	-46.613	+42.639	64 3464	9.4	
11	+38.533	-29.679			9	+51.373	-37.837				b = + .00036	e = - .01143			9	-46.469	+54.135	64 3465	9.3	
											c = - .1230	f = + .0157								
18	+38.570	-11.939	65 3265	9.3	19	+51.527	-14.721	65 3278	9.1		To obtain standard co-ordinates, ξ, η					16	-46.252	+28.844	64 3463	9.3
9	+38.723	-34.484			10	+52.675	-1.529				$\xi = x + ax + by + c$				9	-45.718	+41.312	64 3467	9.7	
9	+38.913	-34.292			12	+52.950	-14.323	65 3279	9.6		$\eta = y + dx + ey + f$				9	-45.199	+33.625			
9	+39.020	-21.922			9	+53.123	-9.007								10	-44.768	+1.234	64 3466	9.7	
16	+39.031	-49.013	65 3266	9.6	15	+53.401	-27.011	65 3280	9.4						14	-44.139	+20.834	64 3469	8.8	
	1201					1261										61				
9	+39.041	-36.286			17	+53.448	-28.007	65 3281	9.3	11	-64.591	+26.572			15	-44.080	+0.761	64 3468	9.3	
9	+39.509	-20.443			9	+53.761	-42.823			9	-63.614	+9.452			9	-44.000	+49.795			
9	+39.580	-2.786			9	+53.815	-51.124			11	-63.304	+33.388			9	-43.918	+25.076			
18	+39.751	-22.175	65 3268	9.2	9	+54.017	-24.694			9	-62.836	+53.613			9	-43.728	+58.317			
9	+39.829	-46.080			10	+54.189	-43.979			22	-62.572	+40.099	64 3450	8.6	10	-43.261	+30.141			
17	+40.029	-5.026	65 3267	9.4	9	+54.427	-21.478	65 3282	9.7	9	-62.102	+5.067			14	-42.982	+12.616	64 3470	9.4	
9	+40.029	-33.369			11	+54.663	-21.414			9	-61.734	+44.932			9	-42.951	+8.881			
9	+40.095	-8.315			20	+54.969	-39.090			65 3284	9.0	9	-61.472	+6.931			10	-42.852	+40.223	
10	+40.321	-33.144			9	+55.395	-47.103			9	-60.474	+53.673	64 3452	9.3	9	-42.433	+35.625			
9	+40.752	-56.867			9	+55.412	-10.769			9	-60.145	+39.510			9	-42.277	+43.304	64 3471	9.7	
	1211					1271										71				
9	+40.982	-21.426			9	+55.635	-20.495			14	-60.115	+45.270			15	-42.273	+52.272	64 3473	9.5	
13	+41.021	-55.173	65 3269	9.6	10	+55.639	-24.822			9	-60.009	+55.890			9	-41.984	+13.300			
9	+41.282	-60.847			13	+56.033	-19.724			9	-59.864	+32.448			14	-41.325	+16.248	64 3472	9.6	
10	+41.521	-27.727			10	+56.991	-33.859			9	-59.340	+45.079			9	-40.176	+58.471			
9	+41.525	-11.671			9	+57.487	-7.432			20	-59.110	+14.349	64 3451	9.1	15	-40.154	+2.084	64 3474	9.3	
9	+41.568	-26.641			9	+57.629	-6.006			9	-58.892	+16.270			10	-39.647	+49.199	64 3475	9.7	
9	+41.842	-14.514			17	+57.725	-30.488	65 3286	9.3	9	-58.607	+54.972			9	-39.240	+46.845			
10	+42.076	-24.119			16	+57.850	-1.886	64 3453	9.7	9	-58.590	+6.260			9	-38.591	+1.766			
11	+42.514	-41.860			19	+57.971	-6.347	65 3285	9.3	9	-58.294	+29.129			9	-37.114	+53.628			
10	+42.679	-22.911			9	+58.074	-43.152			9	-58.044	+41.568			9	-36.779	+25.744			
	1221					1281										81				
9	+43.391	-8.773			9	+58.343	-23.070			9	-57.478	+44.548			9	-36.654	+7.053			
9	+43.539	-25.879			11	+58.396	-28.652			16	-57.433	+59.760	63 3891	9.2	9	-36.613	+54.778			
10	+43.709	-32.114			9	+58.529	-41.412			9	-57.018	+8.736			9	-35.586	+63.218			
9	+43.776	-42.249			9	+59.019	-12.770			18	-56.764	+17.094	64 3454	9.1	9	-35.367	+21.383			
9	+44.825	-12.714			9	+59.300	-4.583			9	-56.311	+12.922			27	-34.855	+11.390	64 3476	8.8	
13	+45.150	-6.917			19	+59.336	-16.731	65 3287	9.2	9	-56.296	+56.753			9	-34.495	+55.380			
11	+45.349	-60.814			9	+59.432	-57.957			9	-55.357	+18.695	64 3455	9.6	28	-33.947	+11.863	64 3477	8.8	
19	+45.599	-44.781	65 3270	9.2	9	+59.603	-47.906			17	-54.892	+17.136	64 3456	9.2	9	-33.542	+13.740			
9	+45.633	-16.824			9	+59.857	-12.150			20	-54.727	+49.875	64 3457	9.1	9	-32.324	+57.108			
9	+46.074	-17.458			18	+60.180	-34.064	65 3288	9.3	15	-53.505	+59.743	63 3895	9.6	9	-32.267	+57.241	63 3911	9.6	
	1231					1291										91				
9	+46.366	-19.581			9	+60.497	-5.428			15	-53.424	+61.243	63 3896	9.2	14	-32.034	+43.665	64 3478	9.5	
17	+46.369	-63.550	65 3273	9.2	19	+60.851	-21.582	65 3289	9.3	9	-53.123	+30.343			9	-31.663	+56.372			
14	+46.456	-19.184	65 3271	9.7	9	+61.170	-64.152			24	-52.526	+53.184	64 3459	8.6	9	-31.040	+13.686			
10	+46.703	-36.523			10	+61.736	-22.125			15	-52.411	+45.315	64 3458	9.4	9	-30.975	+45.509			
19	+46.924	-39.406	65 3272	9.1	10	+62.059	-52.146			9	-52.407	+37.817			9	-30.353	+25.574			
10	+47.152	-54.117			10	+62.068	-61.798			11	-52.030	+55.914	64 3461	9.7	9	-29.829	+53.329			
9	+47.771	-47.340			10	+62.101	-21.789			9	-51.966	+60.128			9	-29.602	+2.795			
9	+47.835	-43.270			9	+62.195	-55.657			10	-51.513	+3.734			36	-29.578	+35.030	64 3479	8.5	
10	+48.104	-38.176			13	+63.205	-1.255			10	-51.129	+14.376	64 3460	9.7	9	-29.456	+26.750			
14	+48.518	-2.359			10	+63.399	-8.624			15	-51.048	+63.340	63 3900	9.3	9	-28.676	+30.551			
	1241					1301										101				
16	+48.531	-35.103	65 3274	9.4	10	+63.495	-23.366			9	-50.776	+9.405			9	-28.670	+39.612			
9	+48.931	-14.601			11	+63.803	-9.332			9	-50.431	+28.246			9	-28.576	+36.273			
10	+49.002	-43.116			27	+64.409	-47.278	65 3290	8.8	9	-50.166	+48.888			21	-28.555	+44.710	64 3480	9.0	
9	+49.070	-0.261			9	+64.835	-35.479			9	-49.911	+4.542			9	-28.499	+43.881			
18	+49.686	-10.794	65 3275	9.2						9	-49.566	+62.600			10	-27.484	+11.594			
35	+49.726	-29.597	65 3277	8.4						10	-49.367	+27.641								

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
9	-24.282	+ 3.169			28	+ 4.418	+14.226	64 3502	8.6	9	+31.220	+40.211			9	+56.475	+40.064		
9	-24.188	+62.418			10	+ 4.764	+56.833			11	+31.381	+37.652			22	+56.657	+15.901	64 3536	8.6
9	-24.116	+ 7.928	64 3482	9.7	9	+ 4.904	+32.241			9	+31.913	+20.791			11	+58.516	+38.418	64 3537	9.7
10	-23.467	+36.234	64 3483	9.7	38	+ 5.783	+ 0.133	64 3503	8.4	9	+32.001	+31.602			9	+58.550	+23.656		
9	-22.843	+38.303			9	+ 5.791	+27.222			9	+32.171	+36.430			9	+59.024	+10.066		
15	-22.669	+47.880	64 3484	9.4	15	+ 5.864	+ 0.269			9	+32.809	+36.283			9	+59.083	+ 1.002		
12	-22.242	+29.144	64 3485	9.4	9	+ 6.047	+23.886			9	+32.860	+25.179			10	+61.217	+18.566		
9	-21.953	+63.104			9	+ 6.875	+31.224			9	+32.986	+56.692			12	+61.457	+19.748	64 3538	9.5
9	-21.621	+50.906			10	+ 6.917	+57.029			22	+33.377	+32.188	64 3520	8.6	9	+61.550	+31.591		
9	-21.619	+30.285			9	+ 7.616	+ 2.423			20	+34.260	+29.375	64 3521	8.7	9	+61.727	+10.184		
	121					181					241					301			
9	-19.169	+22.048			12	+ 7.791	+ 4.158	64 3504	9.4	12	+34.295	+ 4.571	64 3522	9.7	9	+64.140	+49.887		
15	-18.867	+ 9.428	64 3486	9.2	15	+ 7.930	+27.473	64 3505	9.4	10	+34.527	+37.450			9	-64.612	-38.316		
9	-17.917	+40.405			15	+ 8.762	+ 2.747	64 3506	9.2	9	+34.657	+51.432			13	-64.542	-63.753	65 3273	9.2
9	-17.676	+57.606			9	+ 8.883	+40.191			9	+35.701	+12.932			18	-64.524	-16.005	65 3276	9.1
9	-17.511	+61.852			50	+ 9.026	+ 45.286	64 3507	6.8	12	+36.009	+38.484	64 3523	9.7	9	-64.433	-54.274		
9	-17.266	+20.188	64 3487	9.6	18	+ 9.049	+46.751	64 3508	9.1	9	+36.238	+37.794			12	-64.424	-35.218	65 3274	9.4
9	-16.709	+27.061			9	+ 9.151	+15.304			10	+36.550	+34.315			2	-64.296	- 5.879		
36	-16.499	+34.264	64 3488	8.6	10	+ 9.607	+57.971			11	+36.684	+ 9.366			28	-63.632	-29.640	65 3277	8.4
9	-16.248	+38.437	64 3490	9.7	9	+10.852	+50.660			9	+37.061	+35.358			9	-63.390	-43.176		
16	-15.713	+ 0.850	64 3489	9.3	16	+11.169	+51.473	64 3509	9.6	10	+37.450	+51.593			9	-62.984	-38.112		
	131					191					251					311			
9	-14.912	+58.994			9	+11.335	+21.232			9	+37.588	+20.679			19	-62.885	-14.679	65 3278	9.1
9	-14.308	+22.081			9	+11.518	+22.932			20	+38.400	+39.370	64 3524	9.0	9	-62.699	- 1.447		
9	-14.252	+ 9.730			17	+13.939	+31.986	64 3510	9.2	19	+38.545	+59.726	63 3973	9.0	10	-61.497	-14.186	65 3279	9.6
9	-13.079	+19.235			9	+14.437	+ 4.052			9	+38.597	+42.467			9	-61.479	-44.244		
9	-12.917	+23.013			9	+15.993	+40.881			9	+38.690	+25.956			12	-60.144	-26.805	65 3280	9.4
9	-12.849	+48.518			9	+16.654	+ 7.823			10	+38.752	+ 5.797			12	-60.034	-27.793	65 3281	9.3
9	-12.502	+59.606			9	+16.984	+15.575			9	+39.406	+51.041			11	-59.287	-21.130	65 3282	9.7
9	-12.192	+12.127			19	+17.171	+55.813	64 3511	9.2	9	+40.134	+36.732			9	-58.147	-43.670		
9	-12.111	+48.532			9	+17.376	+30.875			9	+40.576	+64.808			9	-58.071	-24.453		
18	- 8.965	+56.754	64 3492	9.1	14	+18.318	+55.219	64 3512	9.7	10	+40.585	+50.459	64 3525	9.7	12	-58.034	-19.346		
	141					201					261					321			
9	- 8.877	+59.414			9	+19.395	+20.667			9	+40.656	+19.750			18	-57.712	-38.734	65 3284	9.0
24	- 8.492	+10.718	64 3491	8.6	9	+19.655	+16.634			26	+40.894	+58.794	63 3974	8.3	11	-57.503	- 1.426	64 3453	9.7
24	- 8.313	+23.620	64 3493	9.0	9	+19.846	+11.031			36	+41.183	+23.812	64 3526	8.2	16	-57.058	- 5.865	65 3285	9.3
9	- 7.984	+18.246			9	+19.876	+11.719			9	+41.166	+31.862			9	-56.072	-33.362		
9	- 7.676	+53.800			9	+19.898	+48.421			9	+41.320	+44.397			13	-55.584	-29.949	65 3286	9.3
9	- 7.139	+51.384			9	+20.129	+19.700			9	+41.321	+13.961			9	-55.038	-28.080		
9	- 7.016	+26.574			9	+21.043	+16.404			18	+41.364	+ 5.478	64 3527	9.2	15	-54.955	-16.132	65 3287	9.2
9	- 6.550	+29.575			9	+23.572	+ 1.419			9	+43.705	+49.607			17	-53.085	-20.852	65 3289	9.3
9	- 6.477	+37.971			9	+24.146	+34.273			9	+43.830	+21.191			15	-52.880	-33.346	65 3288	9.3
9	- 5.067	+29.502			9	+25.083	+35.237			9	+43.928	+21.247			9	-52.489	-47.193		
	151					211					271					331			
9	- 4.553	+42.306			9	+25.423	+20.502			18	+43.979	+ 2.369	64 3528	9.2	11	-52.212	- 0.416		
16	- 3.872	+38.515	64 3495	9.4	35	+ 25.699	+ 11.146	64 3515	8.3	9	+44.258	+37.542			10	-52.185	-21.333		
17	- 3.152	+18.812	64 3496	9.1	9	+25.780	+56.027			34	+ 45.127	+ 32.721	64 3530	8.2	9	-51.851	-20.978		
14	- 2.575	+27.816	64 3497	9.4	15	+25.915	+50.106	64 3514	9.6	17	+45.168	+53.558	64 3529	9.2	9	-51.489	- 7.744		
17	- 2.083	+57.342	63 3936	9.1	9	+26.729	+13.566			9	+45.825	+59.248			11	-51.035	- 8.427		
9	- 1.554	+24.032			9	+26.855	+ 1.483			36	+ 46.862	+ 9.046	64 3531	8.5	10	-49.715	-51.249		
9	- 1.541	+26.507			9	+26.911	+27.847			9	+48.225	+60.900			11	-49.016	-60.863		
11	- 1.445	+21.207	64 3498	9.4	9	+27.607	+64.849			28	+49.040	+57.490	63 3978	8.1	19	-47.710	- 46.230	65 3290	8.8
9	- 1.163	+37.452			9	+28.527	+40.617			9	+49.213	+57.252			9	-46.830	-40.067		
9	- 0.413	+32.023			18	+28.665	+26.511	64 3516	9.3	9	+49.907	+13.381			12	-46.705	- 9.551	65 3291	9.7
	161					221					281					341			
9	- 0.034	+19.574			14	+28.859	+ 4.307	64 3517	9.7	9	+50.647	+42.505			11	-46.185	-29.422		
9	+ 0.251	+60.483	63 3939	9.6	9	+29.634	+61.097			9	+51.076	+16.663			9	-46.182	-57.779		
10	+ 0.313	+ 3.214	64 3499	9.6	10	+29.854	+52.969			9	+52.070	+56.172			11	-45.901	- 7.901		
9	+ 1.818	+36.917			9	+30.303	+ 9.687			18	+52.860	+ 6.586	64 3532	9.0	11	-45.806	-36.021		
9	+ 2.097	+18.861			9	+30.390	+12.968			9	+53.964	+63.322			9	-44.399	-24.700		
16	+ 2.176	+42.320	64 3500	9.3	16	+30.412	+53.642	64 3518	9.5	14	+54.072	+29.703	64 3533	9.7	10	-44.049	-52.581		
11	+ 2.320	+56.323	64 3501	9.7	9	+30.461	+35.616			9	+54.465	+34.382			12	-43.576	-34.896	65 3292	9.6
12	+ 2.538	+58.759	63 3943	9.6	9	+30.637	+14.229			10	+55.155	+12.319			9	-43.264	-16.335		
9	+ 3.050	+ 2.441			9	+30.817	+43.912			24	+55.401	+35.100	64 3534	8.6	9	-42.899	-11.271		
9	+ 3.692	+57.576			9	+31.124	+22.896			18	+56.402	+40.629	64 3535	9.2	19	-41.687	-57.380	65 3293	9.0

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
11	-40°898	-19°535			11	-1°728	-57°336			9	+26°535	-49°301			11	+54°020	-42°249		
9	-40°313	-6°914			9	-1°432	-42°390			9	+26°869	-13°123			12	+54°810	-22°820	65 3343	9.7
9	-40°088	-21°855			11	-0°965	-64°403			10	+26°886	-27°928			10	+55°720	-43°609	65 3344	8.0
12	-39°264	-50°709	65 3294	9.7	9	-0°862	-8°231			11	+28°267	-34°848			9	+56°530	-28°497		
9	-38°088	-37°676			9	-0°704	-25°066			16	+28°511	-30°142	65 3329	9.2	9	+58°417	-19°953		
9	-37°712	-27°186			25	+0°260	-42°331	65 3313	8.5	9	+28°993	-11°205			11	+59°181	-13°508		
11	-37°428	-37°673			12	+0°810	-40°761	65 3314	9.7	9	+30°200	-32°658			9	+59°239	-17°261		
23	-37°424 -29°948		65 3295	8.5	15	+1°019	-48°780	65 3315	9.5	16	+30°334	-40°618	65 3330	9.2	18	+60°901	-44°790	65 3345	9.0
9	-37°083	-34°748			9	+1°748	-12°238			10	+30°508	-8°278			9	+60°920	-44°024		
9	-37°010	-42°661			9	+1°875	-17°502			9	+30°636	-21°188			9	+62°160	-52°578		
	361					421					481					541			
10	-36°755	-21°788			9	+2°217	-29°838			9	+31°971	-63°646			20	+63°078	-45°374	65 3346	8.5
9	-36°655	-6°827			17	+2°536	-23°156	65 3316	9.0	9	+32°089	-64°757			23	+64°757	-16°142	65 3347	8.1
9	-36°329	-20°510			9	+2°664	-57°534			12	+32°144	-1°769	64 3519	9.7	9	+64°763	-49°450		
11	-35°369	-20°986			9	+3°104	-9°569			46	+32°568	-17°540	65 3331	7.0					
9	-33°225	-41°946			14	+3°808	-25°426	65 3317	9.5	10	+33°054	-8°847							
14	-32°459	-26°756	65 3296	9.3	9	+7°282	-9°282			9	+33°859	-45°270							
9	-30°331	-1°666			9	+8°083	-6°583			9	+34°526	-33°076							
9	-26°632	-14°388			9	+8°929	-20°391			11	+34°833	-55°642							
15	-26°613	-12°054	65 3297	9.3	9	+9°849	-44°180			9	+35°237	-45°452							
9	-26°000	-10°272			12	+10°374	-7°507			12	+35°323	-7°940							
	371					431					491								
11	-24°677	-4°532			19	+10°576	-39°148	65 3318	9.0	12	+35°496	-11°860	65 3332	9.7					
13	-24°635	-18°344	65 3298	9.4	11	+11°434	-62°577			9	+35°650	-52°284							
12	-23°949	-20°146	65 3299	9.6	11	+11°664	-35°532			18	+35°950	-37°834	65 3333	9.0					
9	-23°838	-59°340			9	+12°118	-32°667			9	+35°961	-0°703							
9	-23°785	-50°995			11	+12°161	-3°962			9	+36°022	-16°717							
9	-23°699	-25°560			11	+12°719	-13°229			11	+36°380	-61°512							
12	-23°139	-8°838	65 3300	9.4	11	+13°518	-34°597			10	+36°856	-51°147							
9	-22°233	-15°820	65 3301	9.6	9	+13°580	-40°520			11	+37°394	-41°206							
20	-21°917	-34°486	65 3302	8.5	9	+13°681	-29°495			11	+38°307	-61°766							
9	-21°203	-56°319			9	+13°994	-60°653			14	+39°208	-39°891	65 3334	9.5					
	381					441					501								
10	-21°181	-50°608			9	+14°516	-55°146			24	+39°617	-23°552	65 3335	8.2					
9	-20°700	-3°161			9	+14°903	-40°187			12	+39°827	-45°910							
11	-20°199	-27°947			18	+15°520 -44°278		65 3319	9.0	11	+40°081	-11°070							
13	-17°925	-41°549	65 3303	9.7	9	+16°814	-1°976			16	+40°626	-20°840	65 3336	9.7					
22	-17°543	-31°390	65 3304	8.6	11	+17°583	-20°420			18	+41°160	-38°469	65 3337	9.0					
9	-17°229	-46°775			20	+17°703 -10°234		65 3320	8.8	9	+41°452	-36°101							
16	-16°971	-60°128	65 3305	9.2	9	+18°631	-27°142			9	+41°520	-40°406							
9	-16°723	-8°109			10	+18°755	-20°198			12	+42°248	-1°854							
12	-16°315	-25°779	65 3306	9.7	13	+19°688	-0°240	64 3513	9.5	9	+43°326	-32°172							
9	-13°802	-35°455			12	+19°854	-58°231	65 3321	9.7	11	+43°570	-64°945	66 2987	9.5					
	391					451					511								
11	-13°329	-5°324	65 3307	9.7	9	+20°426	-12°228			9	+43°884	-63°706							
10	-12°728	-41°152			9	+20°512	-9°086			17	+44°072	-6°374	65 3338	9.2					
14	-12°499	-29°690	65 3308	9.3	9	+20°690	-36°169			11	+44°466	-51°701							
10	-11°586	-31°733			9	+22°601	-6°472			9	+44°514	-54°613							
11	-10°605	-38°401			13	+23°029	-29°506	65 3322	9.7	11	+44°528	-57°526							
14	-10°464	-20°676	65 3309	9.2	9	+23°099	-42°836			9	+46°587	-0°338							
9	-9°422	-47°496			13	+23°212	-32°824			16	+47°249	-19°917	65 3339	9.6					
9	-8°859	-46°710			9	+23°281	-31°531			18	+47°780	-5°225	65 3340	9.5					
9	-7°325	-19°493			10	+23°654	-37°996			18	+49°182 -27°994		65 3341	8.9					
9	-7°131	-16°009			12	+24°058	-17°692	65 3323	9.7	9	+49°455	-46°596							
	401					461					521								
9	-5°951	-39°401			36	+24°856 -48°785		65 3324	7.4	11	+49°892	-22°330							
9	-5°432	-11°104			9	+25°201	-33°466			24	+50°561	-10°020	65 3342	8.5					
11	-5°400	-0°231	64 3494	9.4	12	+25°307	-37°077			9	+50°765	-57°513							
10	-4°615	-13°804			16	+25°417	-62°751	65 3325	8.9	9	+50°790	-44°289							
9	-4°467	-12°224			9	+25°429	-30°901			9	+50°791	-33°991							
13	-4°417	-58°334	65 3310	9.3	9	+25°823	-62°637			9	+51°476	-0°316							
24	-3°405 -50°225		65 3311	8.0	9	+25°867	-11°216			9	+52°770	-29°274							
9	-3°350	-61°523			24	+25°943	-40°467	65 3327	8.4	11	+53°373	-52°527							
13	-3°256	-50°453			13	+26°040	-26°955	65 3326	9.6	9	+53°952	-18°954							
11	-2°154	-8°997	65 3312	9.7	18	+26°527	-45°362	65 3328	9.0	10	+54°340	-26°288							

C.P.D.					C.P.D.					C.P.D.					C.P.D.									
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.					
PLATE CENTRE. 16h 39m, - 65°. Plate 3031. 1909, Aug 7. PROVISIONAL CONSTANTS. a = - .00158 d = - .00095 b = + .00099 e = - .00152 c = + .0405 f = - .0011 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51, 11 -44.229 +25.708 9 -44.133 +64.380 13 -43.812 + 9.026 14 -43.204 + 3.678 9 -43.249 +35.129 15 -43.070 +16.562 10 -42.863 +14.776 15 -42.632 +30.995 9 -42.150 +47.946 14 -42.094 + 9.035 61 9 -40.858 +64.261 14 -39.921 +28.772 10 -39.701 +58.259 11 -38.408 +35.960 10 -37.804 +23.945 9 -37.570 +10.678 15 -37.545 +18.124 14 -37.503 +57.380 9 -37.397 + 9.179 15 -36.741 +29.083 71 9 -36.722 + 5.887 29 -36.668 +16.678 10 -36.105 + 0.885 10 -36.078 +16.315 16 -35.227 + 2.799 16 -34.696 +12.086 10 -34.542 +36.313 15 -34.344 +42.863 15 -34.153 + 2.490 9 -33.520 +43.686 81 10 -33.149 + 4.350 12 -32.626 +41.753 10 -32.621 + 3.269 9 -32.477 +28.702 9 -32.403 +32.409 16 -31.831 + 7.607 11 -31.143 +46.050 10 -30.388 +30.949 14 -30.256 +16.463 13 -29.813 +35.489 91 11 -29.034 +48.087 9 -29.028 +62.840 27 -28.497 +50.869 11 -27.568 + 9.430 10 -27.290 +47.103 16 -27.013 + 2.864 10 -26.964 +53.635 9 -26.723 + 4.269 15 -26.052 +28.134 11 -25.962 +47.174 101 9 -25.826 + 6.661 10 -25.722 +56.227 11 -24.894 +26.404 15 -24.793 +34.899 11 -24.764 +21.956 10 -24.579 +43.360 12 -24.503 +31.610 9 -24.306 +16.151 11 -24.197 +15.887 10 -24.129 +31.590					111, 10 -23.994 +20.508 9 -23.785 +16.918 10 -23.710 +33.187 14 -22.413 +41.655 53 -22.279 + 7.082 16 -22.227 + 0.048 9 -21.592 +27.037 12 -21.523 +10.271 10 -21.453 +18.160 10 -21.380 +12.836 121 9 -21.242 +29.622 16 -21.068 +27.438 30 -20.493 +15.233 9 -20.309 +16.743 10 -19.521 +25.272 12 -19.207 +29.989 9 -18.873 +28.730 12 -18.605 + 2.571 14 -18.532 +42.295 15 -18.336 +22.514 131 9 -17.685 +64.225 10 -17.608 +43.458 11 -16.961 +64.745 14 -16.693 +10.016 12 -16.343 +33.811 9 -16.324 +40.268 9 -16.178 +16.326 9 -16.003 +10.543 10 -15.930 +29.882 9 -15.909 +26.196 141 11 -15.867 +63.471 12 -15.612 +20.644 9 -14.624 +59.227 34 -14.398 +44.779 12 -14.294 +39.037 15 -11.541 +41.718 11 -11.083 +56.201 11 -10.234 +14.344 11 - 9.531 +63.839 12 - 9.466 +33.855 151 27 - 9.161 +11.328 10 - 8.892 +30.665 28 - 8.637 +49.845 10 - 8.195 +20.373 10 - 8.042 +18.123 11 - 7.287 +55.276 9 - 6.336 +51.219 11 - 5.553 +57.190 9 - 5.375 +56.757 11 - 4.605 +28.550 161 9 - 3.969 +36.987 9 - 3.209 + 0.580 28 - 3.162 +57.805 9 - 3.114 +49.098 13 - 2.552 +53.535 16 - 2.086 +26.347 12 - 1.737 +36.028 42 - 1.645 +48.954 14 - 0.384 +19.933 13 + 0.607 +46.470					171, 15 + 1.179 +53.848 14 + 1.375 +23.925 11 + 1.085 +48.258 9 + 3.188 + 6.505 9 + 4.208 +52.135 15 + 4.344 +21.795 11 + 4.480 +27.317 12 + 4.841 +22.813 10 + 5.347 +50.193 11 + 5.591 +17.268 181 9 + 5.697 +47.380 12 + 6.031 +17.724 10 + 6.092 + 3.731 10 + 6.613 +64.600 12 + 6.722 + 0.433 10 + 7.390 +32.478 10 + 7.505 +54.917 10 + 7.889 +41.185 13 + 8.310 +49.160 15 + 9.125 +42.297 191 16 + 9.183 +17.837 10 + 9.430 +33.483 13 + 9.737 +18.780 9 +10.480 +40.083 37 +13.503 +40.843 16 +13.990 +43.470 12 +14.122 +40.036 16 +14.328 +35.274 16 +14.451 +39.988 11 +15.377 +24.933 201 12 +15.637 +34.298 39 +16.068 +29.214 13 +16.181 +58.558 28 +16.194 +15.356 16 +16.267 +41.200 10 +17.052 +18.824 11 +17.077 +31.200 10 +17.541 +13.157 9 +17.045 +32.972 11 +20.478 +39.782 211 12 +20.816 + 7.819 46 +20.859 +35.758 9 +21.098 + 3.552 11 +21.273 +58.515 12 +21.592 +34.629 14 +21.629 +44.680 11 +21.803 +37.025 12 +22.079 +20.187 10 +22.277 +38.882 9 +22.723 +37.704 221 30 +22.829 +62.040 13 +22.925 + 9.300 10 +23.707 +40.267 11 +24.740 +27.409 12 +25.510 +25.315 13 +25.635 +42.945 11 +27.245 +49.722 24 +27.651 + 1.107 9 +27.700 + 8.459 9 +28.070 +64.985									
9 -64.241 +38.025 14 -63.700 +29.306 10 -63.654 +33.998 9 -63.641 +52.672 35 -63.252 + 6.160 9 -62.842 +30.186 52 -62.768 +34.787 39 -62.167 +40.370 10 -62.036 +39.816 13 -61.372 +12.032 11 45 -60.132 +15.723 15 -59.901 +38.319 9 -59.760 +57.183 9 -59.403 +28.372 11 -58.800 +23.583 9 -58.309 +13.742 15 -57.356 +10.066 11 -56.646 + 1.024 14 -55.773 +18.699 16 -55.619 +19.899 21 11 -55.119 +50.154 12 -54.669 +10.380 37 -54.642 +57.461 33 -54.171 +56.197 16 -53.296 +37.744 11 -53.235 +50.035 11 -52.997 +44.955 9 -52.935 + 5.645 11 -52.255 +53.867 12 -51.383 +31.721 31 34 -51.235 +27.974 11 -50.351 +63.295 9 -49.214 +22.546 9 -48.800 +24.112 10 -48.767 +14.534 28 -48.732 +63.798 9 -48.266 +21.357 10 -47.926 + 3.820 11 -47.844 +17.161 11 -47.799 +57.439 41 16 -47.030 +18.935 9 -46.958 +29.884 10 -46.626 + 1.738 11 -46.499 +24.591 12 -46.482 + 3.114 9 -46.228 + 2.559 12 -45.384 +30.792 9 -45.348 +17.301 35 -44.640 +15.753 15 -44.594 +26.590					64 3533 9.7 64 3532 9.0 64 3534 8.6 64 3535 9.2 64 3536 8.6 64 3537 9.7 64 3538 9.5 63 3986 9.5 64 3539 9.5 64 3540 9.6 64 3541 9.0 63 3988 9.7 63 3989 9.2 64 3542 9.7 64 3543 8.9 64 3544 9.7					63 3995 9.7 64 3545 9.0 64 3546 9.7 64 3547 9.7 64 3548 9.5 64 3549 8.9 64 3550 9.5 64 3551 9.7					64 3554 9.6 64 3555 9.0 64 3556 9.7 64 3557 8.6 64 3558 9.6 64 3559 9.0 64 3560 9.0 64 3561 8.7					64 3562 9.5 64 3564 9.7 64 3565 8.5 64 3566 9.2 64 3567 8.2 63 4022 9.0 64 3568 9.3				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.					No.	Mag.				No.	Mag.				No.	Mag.
	231					291					351					411			
33	+28°102	+58°751	63 4024	8.8	14	+58°392	+26°595			9	-42°390	-12°608			10	-14°403	-23°890		
9	+28°823	+62°311			14	+58°561	+31°763			9	-41°709	-50°563			9	-14°159	-44°750		
11	+30°417	+45°499			14	+58°577	+8°336			9	-41°199	-23°729			12	-13°762	-25°579		
9	+30°991	+52°384			9	+58°648	+50°716			12	-40°759	-2°665			12	-13°074	-30°033		
9	+31°316	+56°710			9	+58°944	+32°625			12	-40°700	-19°004			12	-12°961	-2°572		
12	+31°396	+62°423			13	+59°031	+28°057			9	-40°278	-29°451			9	-12°428	-58°644		
27	+31°455	+54°740	64 3570	9.5	11	+59°088	+1°160			9	-39°850	-45°897			10	-12°226	-46°570		
9	+31°597	+56°414			29	+59°944	+28°004	64 3580	9.7	36	-38°879	-13°672	65 3349	8.9	11	-11°259	-38°143		
9	+31°723	+4°069			9	+60°600	+1°445			9	-38°110	-15°348			9	-10°855	-3°778		
11	+32°031	+48°040			9	+61°506	+4°177			12	-37°971	-35°757			10	-10°649	-15°777		
	241					301					361					421			
15	+32°931	+39°126			10	+61°689	+39°991			9	-37°072	-0°964			11	-10°561	-18°565		
10	+33°703	+5°437			14	+62°845	+47°123	64 3581	9.7	12	-36°838	-37°196			9	-10°535	-59°191		
10	+34°258	+50°909			41	-64°454	-28°611	65 3341	8.9	12	-30°574	-49°171			9	-10°158	-48°306		
14	+34°875	+10°410			53	-64°368	-10°563	65 3342	8.5	9	-30°503	-61°116			11	-10°097	-56°264		
16	+35°511	+3°445	64 3571	9.7	9	-64°145	-0°814			11	-36°186	-22°489			10	-9°978	-34°067		
10	+35°674	+47°393			11	-64°139	-22°895			12	-35°377	-43°169	65 3350	9.5	10	-9°947	-55°526		
10	+36°006	+24°689			9	-64°013	-30°110			11	-35°310	-22°115			12	-9°184	-5°826		
26	+36°021	+15°666	64 3572	9.2	9	-62°835	-47°114			12	-32°392	-39°309			10	-8°714	-9°442		
14	+37°718	+22°439			9	-62°414	-34°455			9	-32°134	-6°488			38	-8°266	-53°917	65 3359	8.9
11	+38°176	+32°265			10	-60°777	-29°621			9	-31°701	-28°458			13	-7°326	-28°912		
	251					311					371					431			
11	+38°216	+46°022			10	-60°327	-19°252			9	-31°056	-37°679			13	-6°933	-3°368		
11	+38°561	+31°646			11	-59°419	-26°510			10	-30°720	-12°278			9	-6°511	-0°266		
12	+39°302	+56°172			14	-59°200	-23°031	65 3343	9.7	18	-30°633	-27°592	65 3351	9.5	11	-5°343	-43°038		
35	+39°910	+50°271	64 3574	8.9	11	-58°908	-52°776			9	-30°380	-34°463			9	-3°628	-43°888		
9	+40°237	+55°825			9	-58°145	-28°098			9	-28°267	-1°146			13	-2°859	-0°598		
27	+40°343	+61°539	63 4030	9.7	11	-57°997	-42°437			9	-28°038	-24°801			10	-2°309	-51°171		
15	+40°658	+52°358			10	-57°075	-28°568			9	-27°821	-53°486			9	-1°967	-42°122		
23	+40°911	+21°537	64 3575	9.7	47	-56°809	-43°711	65 3344	8.6	10	-27°654	-62°700			9	-0°242	-41°488		
14	+41°841	+60°817			11	-55°819	-19°945			10	-24°874	-52°543			11	+0°001	-45°593		
16	+41°920	+11°658	64 3576	9.2	11	-55°503	-13°518			9	-24°856	-42°930			15	+0°780	-6°083	65 3360	9.7
	261					321					381					441			
9	+42°222	+55°216			9	-55°344	-26°438			12	-24°702	-25°071			11	+0°878	-59°317		
31	+42°241	+30°045	64 3577	9.2	10	-55°184	-17°162			9	-24°476	-38°547			9	+1°157	-40°890		
9	+42°403	+49°371			9	-54°123	-8°659			12	-23°874	-48°046			9	+1°253	-48°846		
14	+42°612	+10°648			9	-53°680	-31°119			16	-23°420	-28°688	65 3352	9.7	10	+1°303	-9°367		
9	+42°644	+26°042			9	-53°063	-45°239			12	-23°328	-8°210			12	+1°340	-56°275		
10	+43°836	+28°213			9	-51°891	-42°799			11	-23°013	-24°554			11	+1°630	-39°787		
11	+44°722	+31°619			10	-51°715	-42°242			40	-22°889	-41°662	65 3353	8.6	11	+2°258	-2°200		
13	+44°930	+34°057			40	-51°555	-44°518	65 3345	9.0	11	-22°681	-39°711			12	+2°890	-55°127		
9	+45°222	+4°079			9	-51°260	-5°807			9	-22°572	-6°886			10	+4°353	-22°349		
9	+45°368	+3°695			52	-49°788	-15°654	65 3347	8.1	12	-22°530	-11°125			11	+4°651	-27°466		
	271					331					391					451			
31	+45°435	+40°966	64 3578	9.0	12	-49°747	-52°193			9	-22°171	-7°249			9	+5°319	-44°032		
12	+45°622	+15°946			12	-49°716	-2°629			11	-19°418	-56°932			11	+6°377	-47°375		
45	+45°967	+19°060	64 3579	8.5	9	-49°567	-5°733			18	-19°379	-32°621	65 3355	9.5	10	+6°737	-49°786		
11	+46°295	+59°668			9	-49°534	-37°082			13	-19°309	-44°316	65 3354	9.7	12	+6°985	-34°131		
12	+48°357	+8°365			46	-49°848	-44°939	65 3346	8.5	9	-19°107	-13°524			13	+7°408	-59°207	65 3361	9.7
11	+48°545	+36°059			12	-47°385	-48°883			16	-18°875	-42°684	65 3357	9.2	9	+7°654	-52°871		
11	+48°562	+5°581			9	-46°966	-38°762			41	-18°834	-19°537	65 3358	8.6	9	+7°843	-28°520		
9	+49°202	+10°354			9	-46°613	-25°802			28	-18°607	-61°257	65 3356	9.0	10	+8°328	-62°314		
9	+49°836	+31°676			9	-45°955	-9°343			12	-18°510	-6°580			11	+8°967	-33°363		
9	+51°132	+17°794			9	-45°790	-7°683			12	-18°396	-16°999			12	+9°347	-7°077		
	281					341					401					461			
9	+51°530	+21°019			10	-45°551	-20°012			11	-18°323	-9°967			12	+10°239	-6°196		
9	+51°583	+58°338			10	-45°441	-48°191			11	-18°105	-26°501			11	+11°147	-2°104		
14	+51°969	+11°279			27	-45°213	-60°461	65 3348	9.5	9	-17°939	-11°115			10	+11°449	-26°506		
9	+52°617	+32°040			9	-44°879	-22°431			10	-17°862	-64°450			9	+11°513	-33°369		
10	+53°093	+33°030			11	-44°636	-21°467			10	-17°361	-47°812			12	+12°107	-42°057		
11	+54°370	+18°123			9	-43°491	-37°884			9	-16°951	-26°567			9	+12°284	-53°553		
13	+55°972	+47°667			10	-43°480	-55°032			9	-16°827	-33°198			27	+12°593	-19°190	65 3362	9.2
58	+56°972	+58°240	63 4035	8.2	9	-43°205	-52°559			9	-16°016	-19°439			27	+13°172	-49°701	65 3363	9.0
28	+57°540	+21°945			9	-42°623	-24°944			9	-15°602	-0°305			9	+13°520	-33°870		
10	+58°006	+26°268			9	-42°495	-4°597			10	-15°219	-29°232			11	+13°582	-35°613		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471,					531,					PLATE CENTRE. 16 ^h 57 ^m , - 65°. Plate 1016. 1894, June 29. PROVISIONAL CONSTANTS. a = - .01150 d = + .00002 b = + .00053 e = - .01142 c = - .0768 f = - .0278 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f								
9	+14.775	-28.096			12	+41.574	-29.142			9	-44.907	+49.284			9	-44.907	+49.284		
12	+14.892	-34.110			10	+41.725	-22.891			9	-44.596	+9.521			9	-44.596	+9.521		
10	+14.988	-15.564			9	+41.758	-4.012			9	-43.935	+34.305			9	-43.935	+34.305		
12	+15.013	-30.760			9	+42.587	-2.566			9	-43.164	+11.805			9	-43.164	+11.805		
9	+15.083	-18.108			12	+42.705	-7.124			9	-42.894	+50.459			9	-42.894	+50.459		
9	+15.509	-44.739			9	+42.984	-62.782			30	-42.718	+29.418			30	-42.718	+29.418	64 3586	8.9
9	+15.822	-24.045			9	+43.556	-5.607			15	-42.245	+40.510			15	-42.245	+40.510	64 3587	9.0
9	+16.883	-1.960			12	+43.713	-16.352			24	-41.316	+34.195			24	-41.316	+34.195		
9	+17.585	-29.243			9	+44.893	-6.085			9	-40.767	+53.849			9	-40.767	+53.849		
11	+17.756	-22.773			10	+46.844	-43.914			9	-39.948	+12.462			9	-39.948	+12.462		
	481					541					61								
9	+18.489	-19.124			9	+46.896	-31.552			9	-39.686	+33.735			9	-39.686	+33.735		
9	+18.910	-48.839			53	+47.299	-58.023	65 3374	8.1	9	-39.378	+43.634			9	-39.378	+43.634		
10	+19.207	-29.253			47	+47.417	-9.381	65 3372	8.2	15	-64.181	+10.803			44	-38.070	+36.152	64 3588	8.3
17	+19.452	-10.523	65 3364	9.0	35	+47.874	-5.019	65 3373	8.9	14	-62.751	+47.374			10	-37.525	+59.237		
9	+19.936	-9.467			9	+48.390	-43.851			36	-62.486	+57.986	63 4035	8.2	9	-37.167	+63.739		
12	+20.168	-33.968			9	+48.519	-52.188			9	-62.269	+17.797			12	-36.539	+56.971		
79	+20.200	-12.290	65 3365	7.2	11	+48.943	-8.802			9	-60.484	+6.509			9	-36.261	+48.395		
9	+20.432	-47.103			9	+49.088	-43.654			9	-60.294	+50.605			10	-35.907	+6.281		
10	+21.137	-57.451			15	+50.544	-27.874			19	-59.372	+21.833			10	-35.317	+25.012		
9	+21.669	-38.937			12	+50.727	-54.065			10	-59.198	+26.177			9	-34.726	+63.216		
	491					551					11								
10	+22.429	-37.679			9	+51.476	-36.695			16	-59.044	+31.691			20	-33.080	+54.412	64 3589	9.2
10	+22.453	-36.887			11	+51.967	-48.842			9	-59.006	+3.748			9	-32.919	+60.044		
10	+23.197	-37.655			9	+52.047	-11.033			15	-58.850	+26.533			9	-32.512	+35.186		
25	+23.783	-24.247	65 3366	9.5	33	+52.342	-64.753	66 3040	9.6	9	-58.729	+32.591			10	-32.035	+64.599		
9	+24.454	-28.172			10	+53.007	-30.004			15	-58.312	+28.030			9	-31.369	+22.642		
9	+24.594	-27.345			11	+53.410	-0.022			19	-57.392	+28.036	64 3580	9.7	9	-28.944	+18.041		
12	+25.127	-31.027			62	+53.661	-37.524	65 3375	8.2	16	-57.385	+8.333			9	-28.220	+53.886		
11	+25.396	-16.104			11	+54.943	-40.902			9	-57.267	+48.660			9	-26.572	+38.074		
9	+26.064	-44.692			9	+55.675	-50.243			10	-56.510	+40.111			9	-26.354	+11.202		
9	+27.321	-24.091			9	+57.861	-10.233			9	-56.392	+49.192			12	-26.171	+34.925		
	501					531					21								
9	+27.333	-29.839			15	+58.326	-16.739	65 3376	9.7	9	-56.382	+1.216			12	-26.080	+60.114		
9	+28.142	-25.056			10	+58.668	-42.446			17	-55.839	+47.309	64 3581	9.7	9	-25.937	+39.044		
17	+28.208	-1.481	64 3569	9.5	14	+58.723	-18.615			9	-55.654	+41.338			9	-25.638	+13.874		
9	+28.430	-18.013			9	+59.233	-29.684			9	-55.532	+62.564			9	-25.607	+8.517		
18	+29.425	-35.285	65 3367	9.3	9	+60.796	-48.139			9	-54.879	+1.600			9	-25.541	+36.783		
10	+29.467	-23.557			84	+61.002	-3.726	65 3377	7.5	9	-54.295	+46.887			10	-25.490	+64.146		
9	+29.967	-43.484			9	+61.775	-17.078			9	-54.174	+4.385			9	-25.411	+27.221		
10	+30.179	-30.655			12	+62.564	-6.410			9	-54.102	+0.804			10	-23.369	+45.227		
9	+30.807	-38.015			9	+62.634	-55.901			9	-53.771	+40.163			9	-23.317	+9.592		
9	+31.477	-15.748			40	+62.657	-62.770	65 3378	9.2	9	-52.116	+48.375			18	-23.215	+57.189		
	511					571					31								
10	+31.718	-15.564			11	+62.804	-26.382			10	-52.008	+38.414			20	-21.048	+14.514	64 3590	9.3
9	+32.245	-34.305			11	+63.212	-31.417			9	-51.797	+1.337			11	-20.513	+3.891		
18	+32.321	-22.547	65 3368	9.5						24	-51.320	+30.527	64 3582	9.0	9	-20.201	+44.253		
10	+32.374	-20.963								12	-50.726	+14.588			9	-19.676	+32.544		
16	+33.143	-36.390	65 3369	9.7						9	-50.027	+23.734			9	-19.650	+54.378		
9	+33.452	-17.844								10	-49.762	+42.855			10	-18.607	+62.966		
9	+33.970	-51.183								9	-49.410	+1.818			9	-17.592	+53.015		
12	+34.121	-46.736								9	-48.407	+33.825			16	-17.258	+51.192		
9	+36.342	-28.536								9	-48.332	+16.117			9	-16.190	+4.680		
34	+36.688	-23.075	65 3370	8.8						9	-47.987	+29.135			10	-16.040	+62.808		
	521										41								
12	+37.118	-44.496								9	-47.519	+59.255			10	-15.909	+59.108		
9	+37.250	-2.407								9	-47.439	+29.839			9	-15.216	+39.303		
9	+37.825	-48.428								9	-47.365	+9.380			10	-15.047	+29.751		
9	+38.172	-11.535								9	-47.166	+61.744			9	-14.399	+19.920		
9	+38.359	-12.678								9	-47.075	+9.315			18	-13.908	+36.857	64 3591	9.7
9	+38.923	-2.470	64 3573	9.5						18	-47.072	+14.405	64 3583	9.7	9	-12.724	+52.421		
29	+39.448	-24.013	65 3371	9.2						9	-46.871	+22.915			10	-12.637	+55.290		
10	+39.481	-18.990								9	-46.275	+7.989			16	-11.964	+41.199		
9	+39.870	-23.438								23	-46.072	+22.844	64 3584	9.3	10	-11.311	+64.438		
9	+40.906	-52.055								19	-45.901	+24.524	64 3585	9.7	9	-11.248	+19.119		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
9	-11°071	+46°730			10	+13°044	+64°143			11	+40°835	+64°584			9	-62°598	-39°275		
10	-10°434	+8°765			9	+13°049	+13°798			10	+40°844	+7°494			12	-61°945	-0°379		
11	-9°950	+25°598			24	+13°202	+17°512	64 3593	9°0	12	+40°868	+29°146			11	-61°284	-37°064		
9	-8°357	+41°100			9	+13°455	+31°066			9	+41°066	+31°181			13	-60°838	-54°459		
16	-7°882	+49°714			16	+13°997	+42°849			15	+41°866	+3°439			9	-60°660	-61°070		
9	-7°474	+25°400			9	+14°078	+2°085			9	+42°209	+18°458			11	-60°238	-30°312		
9	-7°393	+44°768			9	+14°851	+37°730			9	+42°768	+3°543			11	-59°942	-49°138		
9	-6°731	+33°901			9	+14°894	+11°923			9	+43°101	+24°178			9	-59°327	-7°779		
9	-6°392	+40°714			18	+15°566	+63°028	63 4061	9°7	9	+44°328	+45°443			26	-59°056	-37°746	65 3375	8°2
10	-6°242	+62°718			16	+15°611	+38°546			22	+45°130	+31°904	64 3603	9°0	16	-58°476	-64°973	66 3040	9°6
	121					181					241					301			
17	-5°778	+5°261	64 3592	9°7	15	+16°025	+21°994			10	+45°974	+52°420			13	-57°552	-41°037		
9	-4°856	+57°040			9	+16°113	+37°574			9	+46°315	+11°419			9	-57°456	-60°447		
9	-4°492	+28°393			9	+16°990	+11°617			9	+46°396	+6°082			9	-56°937	-20°923		
9	-4°434	+47°957			15	+17°534	+46°841			9	+46°410	+24°246			9	-56°783	-10°243		
9	-4°381	+34°457			9	+18°207	+50°890			18	+46°483	+45°923	64 3604	9°4	9	-56°158	-50°299		
9	-3°881	+28°365			9	+18°265	+17°307			9	+46°685	+37°963			18	-55°871	-16°691	65 3376	9°7
9	-3°568	+34°821			15	+18°814	+13°613			12	+46°695	+22°169			9	-55°368	-7°668		
9	-2°750	+37°794			9	+19°709	+2°625			9	+46°705	+46°351			15	-55°351	-18°542		
10	-2°315	+13°211			16	+20°766	+20°196			9	+46°760	+30°148			50	-54°088	-3°519	65 3377	7°5
9	-1°863	+19°978			9	+20°812	+20°748			9	+46°842	+50°935			10	-54°072	-29°535		
	131					191					251					311			
9	-1°704	+23°458			9	+20°906	+59°702			15	+47°518	+46°645	64 3605	9°9	9	-53°955	-12°481		
10	-1°580	+56°420			9	+21°359	+58°596			10	+47°709	+14°326			10	-53°932	-46°999		
9	-1°479	+34°423			9	+21°949	+53°812			9	+48°830	+0°099			9	-53°687	-17°118		
15	+0°249	+23°200			9	+22°151	+26°676			19	+49°650	+5°584	64 3606	9°6	9	-52°396	-34°437		
9	+0°930	+51°861			14	+22°546	+27°205			42	+50°228	+29°095	64 3607	8°4	11	-52°393	-16°790		
9	+1°322	+44°977			20	+23°605	+25°688	64 3594	9°0	9	+51°288	+12°596			14	-52°375	-6°101		
10	+2°266	+39°839			9	+23°811	+44°660			25	+51°376	+11°008	64 3608	9°0	9	-52°220	-30°123		
9	+2°992	+41°469			15	+25°138	+37°471	64 3596	9°9	9	+52°068	+44°057			9	-51°885	-61°115		
14	+3°057	+43°485			9	+25°666	+11°910			9	+52°153	+37°148			11	-51°220	-47°828		
15	+3°198	+56°163			9	+25°934	+29°651			9	+52°214	+45°674			9	-51°020	-53°547		
	141					201					261					321			
9	+3°225	+53°603			15	+26°015	+42°259			17	+52°231	+11°254	64 3609	9°9	12	-50°717	-25°994		
9	+3°622	+27°028			9	+26°222	+58°981			9	+52°599	+52°706			9	-50°462	-37°593		
10	+3°647	+41°238			9	+27°334	+29°903			9	+53°040	+5°448			11	-49°964	-30°986		
10	+3°812	+44°707			9	+27°621	+38°422			17	+53°412	+25°261			9	-48°854	-56°108		
9	+4°144	+22°890			9	+28°292	+52°194			18	+53°731	+53°481	64 3610	9°3	11	-48°835	-55°436		
9	+4°199	+20°654			9	+28°338	+6°086			15	+54°174	+36°389			11	-48°499	-61°758		
9	+4°204	+54°215			15	+29°037	+48°731			9	+54°596	+38°376			19	-48°335	-62°296	65 3378	9°2
9	+4°213	+42°466			18	+29°369	+13°948	64 3597	9°5	9	+55°159	+35°106			12	-47°827	-33°662		
9	+5°549	+15°699			9	+29°449	+35°749			9	+56°309	+8°935			9	-47°049	-31°567		
9	+5°650	+27°746			9	+29°637	+46°340			9	+56°386	+22°964			18	-46°739	-19°923	65 3379	9°5
	151					211					271					331			
9	+5°807	+18°929			11	+30°844	+52°649			20	+56°769	+9°041	64 3612	9°0	9	-45°787	-52°225		
9	+5°857	+33°537			9	+31°052	+3°203			9	+57°605	+7°503			9	-45°503	-51°825		
9	+5°935	+60°667			10	+31°166	+52°700			24	+57°892	+56°447	64 3611	8°5	9	-45°493	-48°294		
9	+6°190	+21°467			9	+31°683	+11°229			11	+58°199	+25°634			20	-44°257	-64°710	66 3047	9°0
12	+7°131	+58°651			9	+31°781	+54°570			9	+59°973	+31°372			18	-43°788	-55°128	65 3380	9°3
10	+7°204	+50°753			9	+33°499	+63°102			9	+60°289	+59°800			19	-42°867	-48°677	65 3381	9°7
15	+7°337	+41°155			9	+33°770	+52°622			9	+61°269	+42°152			16	-42°672	-8°591	65 3382	9°6
9	+8°132	+28°471			9	+34°658	+58°262			9	+61°521	+3°599			9	-42°541	-22°477		
10	+8°413	+58°283			9	+34°687	+17°112			9	+61°947	+36°626			17	-42°001	-28°460	65 3383	9°6
9	+8°645	+8°384			10	+35°543	+4°289			9	+62°522	+34°389			9	-41°787	-18°051		
	161					221					281					341			
9	+8°918	+29°876			9	+35°952	+18°670			9	+62°561	+12°850			9	-41°775	-28°561		
9	+9°339	+52°756			15	+36°117	+11°509			10	+62°700	+19°591			9	-41°625	-50°954		
9	+10°134	+56°751			17	+36°123	+44°110	64 3598	9°5	9	+64°292	+57°718			9	-40°525	-54°025		
16	+10°241	+43°991			20	+36°142	+45°667	64 3599	9°3	12	+64°818	+7°231			9	-39°694	-8°875		
9	+10°981	+11°484			40	+36°621	+7°634	64 3600	8°7	12	+64°969	+19°860	64 3614	9°8	9	-39°683	-19°563		
11	+11°484	+54°717			9	+37°159	+22°032			38	-63°976	-58°636	65 3374	8°1	11	-39°196	-22°659		
9	+11°710	+14°335			16	+38°300	+50°456			9	-63°879	-44°438			9	-38°804	-31°503		
9	+11°724	+56°983			12	+39°130	+57°808			10	-63°172	-52°730			9	-38°694	-23°610		
9	+12°041	+41°963			9	+40°045	+2°789			9	-63°074	-31°214			9	-38°163	-16°586		
12	+12°880	+13°771			19	+40°759	+16°842	64 3601	9°2	16	-62°855	-28°345			19	-38°126	-62°932	65 3384	9°2

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
12	-37°317	-50°174			9	-9°304	-37°265			16	+11°384	-35°137			9	+30°605	-50°895		
12	-36°464	-59°457			10	-8°660	-59°948			11	+11°728	-5°738			9	+30°609	-24°711		
9	-36°415	-17°268			9	-7°998	-8°434			14	+11°770	-28°121			20	+31°334	-22°856	65 3406	9.2
20	-36°379	-38°207	65 3385	9.2	13	-7°632	-54°229			13	+11°844	-15°684			14	+31°341	-17°098		
20	-36°298	-6°901	65 3386	9.5	14	-7°454	-60°545			11	+11°990	-47°405			9	+32°053	-53°466		
12	-35°894	-60°204			10	-7°115	-56°043			22	+12°862	-45°497	65 3397	8.9	11	+32°004	-39°215		
12	-33°752	-53°836			14	-7°101	-11°070	65 3391	9.7	16	+12°954	-53°604			10	+32°191	-30°567		
30	-33°720	-12°120	65 3387	8.5	14	-6°948	-25°528			10	+13°738	-49°785			9	+32°360	-11°349		
10	-33°470	-16°535			9	-6°934	-12°683			12	+13°821	-2°947			17	+32°620	-20°013	65 3407	9.6
9	-32°737	-47°642			9	-6°290	-49°548			10	+13°822	-61°063			11	+33°031	-27°643		
	361					421					481					541			
9	-29°307	-26°596			9	-6°017	-19°095			21	+14°182	-64°506	66 3064	9.0	9	+33°402	-4°561		
10	-29°228	-59°024			9	-5°917	-18°873			12	+14°538	-12°126			9	+33°496	-18°262		
11	-28°770	-44°756			9	-5°317	-6°774			11	+14°935	-23°417			9	+35°536	-28°415		
10	-28°194	-48°143			11	-4°035	-8°685			9	+15°145	-26°338			12	+35°596	-21°143		
11	-27°006	-02°731			19	-3°759	-55°202	65 3392	9.7	9	+15°321	-12°884			10	+35°755	-48°570		
9	-26°996	-4°831			9	-3°310	-30°912			15	+15°355	-52°991			9	+35°988	-11°767		
9	-26°733	-63°307			15	-3°016	-50°145			11	+15°489	-54°131			14	+38°105	-4°883		
10	-26°024	-2°861			9	-2°903	-10°438			12	+15°631	-34°248			11	+38°543	-15°060		
9	-25°714	-19°573			12	-2°685	-41°201			22	+15°923	-11°264	65 3398	8.7	9	+38°635	-3°181		
9	-25°632	-19°505			14	-2°601	-49°596			13	+15°924	-16°628			11	+40°288	-48°293		
	371					431					491					551			
12	-25°066	-53°386			9	-2°501	-59°146			15	+16°711	-36°555	65 3399	9.7	12	+40°297	-4°895		
16	-24°926	-47°589	65 3388	9.7	9	-2°074	-26°992			9	+16°962	-15°298			9	+40°491	-22°206		
9	-24°586	-28°628			9	-2°011	-53°364			14	+17°249	-20°735	65 3400	9.9	15	+40°858	-1°655	64 3602	9.9
9	-24°267	-22°644			11	-1°074	-57°476			15	+17°391	-52°617			10	+41°164	-28°195		
13	-24°123	-37°195			9	-0°975	-6°803			16	+17°940	-18°302	65 3401	9.5	14	+41°329	-28°383		
11	-23°883	-24°426			9	-0°321	-52°243			15	+18°039	-47°558			9	+42°154	-4°028		
9	-23°697	-30°148			10	-0°180	-32°531			9	+18°622	-46°014			11	+42°375	-18°282		
14	-23°663	-21°383			9	+0°087	-12°746			9	+18°995	-32°608			12	+42°422	-20°310		
10	-23°248	-30°063			11	+0°093	-36°082			13	+20°584	-30°115			16	+43°059	-16°032		
13	-22°942	-40°934			9	+0°159	-2°905			19	+20°871	-38°252	65 3402	9.0	26	+43°876	-34°778	65 3408	8.4
	381					441					501					561			
9	-22°253	-47°286			9	+0°168	-31°896			9	+21°780	-26°718			9	+43°566	-31°213		
12	-22°090	-37°665			9	+0°413	-32°530			16	+22°073	-50°493			9	+43°739	-48°528		
10	-22°066	-22°820			9	+0°573	-44°214			9	+22°327	-46°469			9	+43°912	-53°659		
12	-21°882	-26°940			15	+0°708	-23°728			10	+22°525	-20°891			9	+44°161	-13°033		
9	-20°445	-15°728			9	+0°976	-38°288			9	+22°598	-41°164			9	+44°278	-11°822		
9	-19°805	-1°458			15	+1°887	-59°926			9	+22°937	-7°929			32	+44°452	-51°437	65 3409	8.4
13	-19°461	-28°940			13	+2°043	-18°168			10	+23°122	-28°683			12	+44°468	-34°664		
10	-19°225	-31°831			11	+2°069	-27°114			13	+23°288	-17°997			15	+45°037	-60°673	65 3410	9.3
9	-18°204	-41°267			9	+2°332	-46°066			14	+23°299	-41°044			10	+46°622	-25°896		
10	-17°235	-31°704			19	+2°459	-36°388	65 3393	9.5	16	+23°334	-4°036	65 3403	9.6	9	+46°630	-11°417		
	391					451					511					571			
9	-16°634	-1°560			9	+2°634	-5°148			9	+24°399	-59°342			11	+46°841	-20°839		
9	-16°547	-55°161			9	+3°071	-11°528			10	+24°413	-14°487			9	+47°794	-5°309		
9	-15°434	-19°733			9	+3°234	-57°750			18	+24°587	-0°285	64 3595	9.0	12	+47°924	-17°262		
26	-15°375	-30°716	65 3389	8.2	9	+3°241	-46°466			10	+24°789	-55°904			9	+48°318	-36°512		
9	-14°810	-4°543			50	+3°578	-36°851	65 3394	7.6	14	+24°906	-59°353	65 3404	9.9	11	+48°386	-52°539		
9	-14°641	-19°843			13	+5°119	-64°479			19	+25°555	-54°292	65 3405	9.2	9	+48°805	-32°628		
9	-14°611	-2°054			9	+5°775	-21°383			12	+25°984	-63°237			14	+49°549	-61°873	65 3411	9.6
11	-14°595	-64°074			9	+7°294	-39°379			12	+26°551	-8°613			9	+49°556	-23°312		
11	-13°194	-35°106			9	+7°346	-59°160			11	+26°645	-45°511			9	+50°250	-28°939		
18	-12°985	-49°581	65 3390	9.5	11	+7°766	-53°681			12	+26°872	-2°848			12	+50°518	-44°173		
	401					461					521					581			
10	-12°652	-27°645			14	+7°782	-58°560			11	+27°545	-52°980			13	+50°883	-20°756		
15	-12°524	-23°758			10	+8°156	-26°857			9	+28°140	-21°584			9	+51°290	-60°052		
11	-12°518	-43°922			12	+8°724	-37°707			9	+28°656	-27°315			15	+51°511	-12°352	65 3412	9.9
10	-11°805	-9°679			13	+8°824	-27°087			12	+28°739	-0°273			11	+51°727	-23°570		
14	-11°137	-63°672			12	+9°383	-4°829			9	+28°740	-26°627			14	+52°449	-54°668	65 3413	9.9
9	-10°595	-34°596			9	+9°436	-43°504			9	+28°809	-49°413			9	+52°592	-4°392		
11	-9°769	-49°620			19	+10°638	-49°579	65 3395	9.3	11	+29°061	-31°061			11	+52°880	-28°218		
15	-9°537	-48°040			17	+10°968	-6°197	65 3396	9.7	9	+29°179	-46°544			12	+52°935	-61°188		
9	-9°532	-4°511			11	+11°133	-7°077			11	+29°684	-26°992			9	+53°279	-48°642		
15	-9°330	-35°879			10	+11°181	-54°356			12	+30°486	-54°404			12	+53°312	-18°087		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591,				PLATE CENTRE. 17 ^h 15 ^m , - 65°. Plate 1031. 1894, Aug. 3. PROVISIONAL CONSTANTS. a = - .01154 d = - .00021 b = + .00039 e = - .01136 c = - .0542 f = - .1471 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$														
20	+53.314	-40.369	65 3414	9.0						9	-35.339	+54.376			11	-6.167	+24.422		
13	+54.320	-20.587								9	-35.326	+30.933			12	-6.049	+16.254		
10	+54.687	-14.748								16	-34.279	+60.278	63 4085	8.5	11	-5.783	+44.734		
10	+55.170	-12.703								9	-34.254	+49.301			9	-3.657	+60.161		
11	+55.371	-49.167								9	-34.168	+24.195			11	-2.844	+60.176		
12	+56.420	-39.335	65 3415	9.5						9	-33.637	+8.054			9	-2.326	+24.784		
9	+56.590	-48.069								9	-32.775	+34.810			9	-2.107	+29.160		
11	+56.640	-35.958								9	-32.651	+19.542			9	-1.920	+17.824		
9	+57.304	-7.771								9	-32.391	+33.842			10	-1.746	+16.396		
15	+57.367	-41.769	65 3416	9.8						12	-32.052	+24.165	64 3621	9.8	9	-0.907	+33.331		
	601										61					121			
13	+57.624	-6.961			14	-64.916	+10.606	64 3608	9.0	9	-31.613	+61.320			19	-0.710	+32.291	64 3627	8.7
9	+58.009	-58.606			10	-64.084	+10.905	64 3609	9.9	9	-30.462	+61.399			9	-0.637	+12.444		
14	+58.788	-25.476			10	-63.952	+36.126			9	-30.153	+8.617			9	-0.295	+30.387		
19	+58.884	-39.465	65 3417	9.2	11	-63.909	+24.977			9	-27.209	+2.377			14	+0.120	+60.909	63 4097	9.3
9	+58.942	-51.298			9	-62.857	+34.909			9	-26.621	+6.830			10	+0.492	+50.257		
9	+59.312	-22.153			9	-62.854	+5.180			9	-26.364	+46.657			14	+0.754	+28.739	64 3628	9.2
11	+60.461	-44.048			15	-61.664	+56.388	64 3611	8.5	10	-26.091	+9.614			9	+1.913	+59.808		
17	+60.810	-31.884	65 3418	9.4	9	-60.768	+22.895			9	-25.874	+22.096			9	+2.536	+53.585		
9	+61.426	-17.052			9	-59.517	+59.901			9	-25.443	+39.245			16	+2.580	+24.286	64 3629	9.2
11	+61.455	-29.855			15	-59.414	+9.039	64 3612	9.0	13	-24.462	+3.125	64 3622	9.5	9	+3.142	+4.172		
	611					11					71					131			
14	+61.993	-0.289	64 3613	9.9	9	-59.166	+25.683			10	-24.096	+23.277			11	+3.244	+41.905		
15	+62.016	-7.720	65 3419	9.6	9	-57.814	+31.533			9	-22.866	+12.340			9	+4.638	+30.384		
9	+62.234	-50.098			9	-57.250	+42.385			10	-22.833	+58.432			9	+6.031	+45.802		
9	+62.648	-8.277			9	-56.195	+36.913			9	-21.266	+40.421			9	+7.919	+7.722		
14	+63.510	-54.800	65 3420	9.4	9	-55.466	+34.712			10	-21.176	+55.388			10	+8.309	+44.121		
9	+64.744	-17.268			9	-55.375	+58.102			9	-21.027	+46.163			9	+9.574	+42.595		
					11	-54.251	+19.986			9	-20.419	+23.126			9	+9.611	+30.491		
					9	-53.895	+13.247			11	-20.240	+41.145			9	+10.175	+10.890		
					11	-53.524	+0.094	64 3613	9.9	9	-19.901	+29.001			9	+11.500	+6.978		
					12	-51.987	+20.421	64 3614	9.8	9	-18.691	+27.161			10	+11.814	+56.993		
						21					81					141			
					9	-51.824	+25.408			9	-18.260	+46.219			9	+12.313	+11.761		
					12	-51.554	+25.546			9	-18.250	+53.224			9	+12.403	+34.461		
					11	-51.229	+7.809			10	-17.080	+51.795			20	+13.137	+34.801	64 3630	8.4
					9	-50.948	+28.522			9	-17.025	+11.703			15	+13.479	+19.647	64 3631	9.2
					11	-50.895	+53.825			9	-16.824	+9.062			14	+14.057	+35.215	64 3632	9.6
					11	-50.582	+9.708			9	-16.765	+27.777			14	+14.593	+22.064	64 3633	9.4
					9	-49.175	+42.898			9	-16.475	+0.982			9	+15.459	+43.370		
					11	-47.953	+26.917			13	-16.152	+30.864	64 3623	9.5	9	+15.856	+11.250		
					23	-47.715	+22.245	64 3615	8.4	18	-15.649	+62.671	63 4092	8.2	9	+15.862	+60.542		
					11	-46.766	+54.712			9	-15.226	+51.436			23	+16.070	+5.473	64 3634	8.2
						31					91					151			
					15	-46.323	+21.629	64 3616	9.2	9	-14.945	+62.261			10	+16.625	+31.435		
					9	-45.928	+53.247			9	-14.576	+40.581			9	+16.843	+43.799		
					15	-45.144	+37.567	64 3617	9.2	9	-14.008	+13.194			9	+17.405	+44.467		
					9	-44.514	+34.830			10	-13.851	+4.332			14	+17.524	+12.307	64 3635	9.3
					14	-44.277	+51.345	64 3618	9.2	11	-13.703	+40.775	64 3624	9.9	9	+17.999	+17.268		
					9	-43.078	+42.130			15	-13.171	+9.455	64 3625	9.2	12	+18.013	+36.713		
					11	-42.693	+36.167			11	-12.707	+61.574			9	+18.927	+55.429		
					10	-41.152	+32.441			9	-12.245	+29.110			9	+19.062	+10.277		
					12	-41.088	+25.122	64 3619	9.4	9	-11.355	+61.306			12	+20.209	+50.857		
					9	-39.920	+16.266			9	-11.275	+50.883			9	+20.627	+36.770		
						41					101					161			
					9	-39.479	+48.113			9	-10.949	+22.276			13	+21.047	+37.924	64 3636	9.9
					9	-38.951	+29.900			10	-10.597	+18.197			19	+21.080	+8.429	64 3637	8.5
					9	-38.577	+17.834			10	-9.546	+50.766			11	+22.129	+57.425		
					9	-37.142	+30.811			18	-8.188	+49.821	64 3626	8.8	10	+22.691	+44.003		
					9	-36.881	+32.347			9	-7.887	+62.564			11	+23.839	+3.731		
					9	-36.486	+53.994			9	-7.767	+43.900			9	+24.615	+61.338		
					11	-36.417	+25.817			10	-7.724	+54.579			10	+27.075	+10.037		
					9	-36.109	+25.047			9	-7.545	+57.478			14	+27.454	+9.549	64 3638	9.2
					10	-35.833	+48.191			9	-7.282	+38.655			14	+27.832	+61.031	63 4108	9.2
					14	-35.446	+31.701	64 3620	9.3	9	-7.158	+54.478			11	+28.113	+45.421		

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
9	+28°716	+55°727			14	-53°842	-39°190	65 3417	9°2	20	-15°316	-13°087	65 3435	8°9	11	+25°573	-40°592		
11	+29°860	+32°073			9	-53°762	-39°784			10	-14°911	-22°673			9	+25°975	-50°741		
11	+31°043	+32°653			12	-52°975	-7°301	65 3419	9°6	11	-13°776	-35°535			11	+26°003	-48°854		
9	+31°262	+51°041			13	-52°452	-31°490	65 3418	9°4	9	-12°987	-4°789			12	+26°558	-3°969	65 3448	9°8
9	+35°196	+23°130			9	-51°949	-29°432			12	-11°843	-19°047			11	+27°430	-55°174		
10	+35°694	+30°772			9	-51°948	-43°651			22	-11°042	-51°166	65 3436	8°4	9	+27°720	-25°544		
10	+36°436	+33°531			9	-50°518	-32°034			14	-8°551	-24°900	65 3437	9°4	17	+27°769	-52°921	65 3449	8°8
9	+36°994	+21°300			9	-49°736	-49°558			9	-7°752	-39°571			11	+28°383	-13°093	65 3450	9°9
9	+41°550	+9°458			12	-48°149	-54°101	65 3420	9°4	9	-6°397	-58°354			9	+29°101	-29°955		
9	+42°261	+59°206			9	-46°792	-29°476			42	-6°242	-36°441	65 3438	7°1	9	+29°780	-43°697		
	181					241					301					361			
9	+42°603	+37°054			16	-40°424	-34°387	65 3421	9°5	13	-5°488	-24°802	65 3439	9°9	9	+31°235	-46°589		
13	+42°743	+15°254	64 3639	9°3	9	-44°892	-40°247			12	-5°222	-53°179			9	+32°827	-48°310		
9	+43°283	+11°042			16	-44°505	-47°901	65 3422	9°0	9	-4°405	-48°608			11	+33°633	-64°192		
9	+43°719	+32°053			14	-43°148	-27°168	65 3423	9°9	9	-4°136	-32°595			10	+36°054	-54°945		
11	+43°925	+12°708			9	-42°251	-59°957			9	-4°071	-20°202			13	+36°644	-22°294		
9	+44°194	+30°955			15	-41°849	-7°235	65 3424	9°3	15	-3°403	-22°204	65 3440	9°2	14	+36°829	-31°083	65 3451	9°5
9	+44°642	+41°929			11	-41°069	-52°547			12	-2°914	-18°344			12	+37°321	-43°324		
11	+44°799	+15°858			11	-39°942	-64°918	66 3084	9°8	9	-2°675	-23°327			10	+38°748	-20°554		
9	+45°841	+10°508			16	-39°772	-29°970	65 3425	9°2	13	-2°345	-57°516	65 3441	9°8	11	+42°155	-30°991		
11	+46°310	+59°002	63 4116	9°8	11	-38°627	-24°927			11	-2°031	-24°142			20	+42°284	-51°177	65 3452	8°5
	191					251					311					371			
11	+48°808	+8°541			9	-37°842	-40°572			9	-1°241	-51°049			15	+43°429	-2°696	65 3453	9°5
9	+48°877	+34°342			11	-37°492	-58°475			10	-0°678	-25°822			11	+46°503	-27°485		
9	+48°885	+27°507			11	-36°941	-47°011			9	-0°609	-52°674			9	+47°592	-22°727		
9	+49°409	+3°583			9	-36°616	-29°899			20	-0°454	-5°791	65 3442	8°8	9	+47°634	-28°468		
9	+50°177	+14°498			11	-35°032	-43°341			9	+0°892	-23°430			11	+48°757	-45°628		
9	+50°856	+13°685			10	-34°478	-60°896			9	+0°979	-55°609			16	+48°865	-25°679	65 3454	9°3
11	+51°630	+28°517			11	-34°219	-43°770			9	+1°162	-63°649			13	+48°938	-38°225	65 3455	9°9
12	+51°637	+54°508	64 3641	9°2	9	-31°971	-13°211			9	+3°463	-7°528			9	+49°154	-64°423		
9	+51°937	+25°098			9	-31°595	-24°326			10	+4°056	-34°496			16	+49°417	-1°376	64 3640	9°2
13	+52°054	+9°200	64 3642	9°6	9	-31°155	-32°423			18	+4°965	-34°266	65 3443	8°8	9	+51°713	-43°379		
	201					261					321					381			
11	+54°416	+40°131			13	-30°929	-46°205	65 3426	9°6	11	+5°124	-29°081			10	+51°796	-38°480		
15	+55°899	+3°224	64 3643	9°2	9	-30°921	-57°160			9	+5°674	-64°199			9	+52°634	-8°445		
9	+56°557	+20°774			10	-30°911	-40°268			20	+6°464	-63°043	66 3108	8°8	13	+54°178	-44°213	65 3456	9°8
9	+56°616	+28°321			14	-30°487	-31°576	65 3428	9°8	16	+7°398	-49°525	65 3444	9°2	11	+54°442	-25°761		
9	+57°518	+58°348			10	-30°256	-0°298			24	+8°204	-12°554	65 3445	8°4	11	+54°951	-59°361		
11	+57°741	+41°799			13	-30°131	-56°344	65 3427	9°6	11	+8°731	-60°103			12	+55°148	-58°614	65 3457	9°4
12	+58°560	+60°230	63 4122	9°2	15	-29°774	-2°197	65 3429	9°4	12	+9°392	-59°977			20	+56°382	-57°505	65 3458	8°2
10	+58°694	+37°249			9	-29°010	-62°519			9	+9°494	-7°186			11	+57°051	-12°241		
11	+59°937	+31°968	64 3644	9°6	13	-28°678	-25°488	65 3430	9°9	10	+9°782	-43°652			9	+57°385	-14°851		
9	+61°121	+52°830			11	-28°442	-15°174			12	+10°456	-36°176			13	+57°412	-26°711		
	211					271					331					391			
11	+61°537	+24°405			11	-27°273	-46°842			11	+11°189	-30°119			13	+58°218	-11°357	65 3459	9°9
9	+63°022	+32°137			15	-27°239	-55°402	65 3432	9°2	11	+11°217	-28°749			9	+58°478	-2°861		
9	+64°260	+7°915			11	-27°190	-58°391	65 3431	9°9	9	+13°219	-64°862			16	+58°624	-51°024	65 3460	9°2
9	+64°431	+3°745			10	-27°166	-58°518			13	+13°664	-49°781	65 3446	9°8	13	+58°895	-44°129	65 3461	9°9
10	-63°141	-21°103			9	-26°621	-19°008			10	+16°178	-40°557			12	+61°454	-0°867		
11	-63°118	-12°680	65 3412	9°9	16	-25°855	-25°866	65 3433	9°3	10	+17°015	-35°841			15	+61°636	-36°387	65 3462	9°0
9	-62°097	-23°864			16	-24°203	-8°437	65 3434	9°2	14	+17°280	-59°044			9	+61°998	-30°260		
10	-61°829	-44°494			11	-24°171	-29°742			11	+18°997	-33°358			10	+63°774	-6°144		
11	-61°547	-62°195	65 3411	9°6	11	-22°989	-29°655			9	+19°086	-44°825			13	+64°514	-16°701		
10	-60°898	-18°273			11	-22°512	-12°844			10	+19°316	-18°244							
	221					281					341								
9	-60°609	-28°406			10	-21°871	-27°826			11	+19°798	-56°144							
11	-59°733	-20°692			12	-21°256	-53°794			15	+20°801	-43°088	65 3447	9°6					
10	-59°331	-40°490	65 3414	9°0	9	-19°617	-31°912			9	+20°965	-59°219							
11	-59°191	-54°815	65 3413	9°9	9	-19°172	-61°985			15	+22°827	-64°499	66 3114	8°8					
10	-58°227	-61°275			10	-18°614	-38°003			16	+22°887	-64°468							
11	-57°428	-6°863			9	-18°192	-45°907			9	+23°669	-25°598							
9	-56°654	-49°127			9	-17°460	-61°466			12	+23°686	-19°667							
13	-56°299	-39°238	65 3415	9°5	10	-16°023	-48°354			9	+23°998	-17°182							
12	-55°163	-41°601	65 3416	9°8	10	-15°889	-54°415			16	+24°829	-58°569							
11	-54°924	-25°238			9	-15°374	-62°316			10	+25°059	-54°128							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE.																			
17h 33m, - 65°.																			
Plate 3946. 1915, July 13.																			
PROVISIONAL CONSTANTS.																			
a = - .01168 d = - .00008																			
b = + .00008 e = - .01157																			
c = + .1414 f = - .0421																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
17	-64.255	+ 8.660	64 3642	9.6	14	51,				10	111,					9	171,		
15	-64.039	+39.675			13	-44.398	+24.096			12	-27.104	+ 5.899				11	- 5.873	+40.054	
10	-62.649	+42.282			9	-44.007	+19.121			16	-26.597	+53.315				19	- 5.581	+23.492	
11	-62.282	+58.029			12	-43.679	+24.365			22	-26.191	+38.890				13	- 5.455	+50.012	
20	-61.394	+60.018	63 4122	9.2	10	-43.598	+42.200			13	-26.021	+49.818	64 3652	9.2		9	- 5.418	+37.745	
						-43.115	+14.744				-25.840	+23.438				9	- 5.237	+29.137	
					9	-42.754	+ 6.416			9	-25.291	+57.539				13	- 4.657	+15.050	
					13	-42.658	+21.054			11	-25.216	+11.050				22	- 4.418	+51.175	
					10	-42.607	+34.031			14	-25.121	+55.181				9	- 4.223	+24.150	
					9	-42.368	+17.745			11	-24.524	+57.348				11	- 3.870	+17.800	
					11	-42.031	+44.280			20	-22.443	+ 7.602	64 3653	9.6		9	- 2.956	+49.441	
					61						121						181		
					10	-41.120	+ 1.761			10	-22.228	+39.301				9	- 2.520	+55.397	
					9	-40.681	+62.302			9	-21.932	+62.254				13	- 2.413	+51.519	
					12	-40.322	+15.769			9	-20.722	+26.043				10	- 2.333	+ 9.957	
					13	-40.218	+ 1.455			11	-20.542	+36.439				11	- 2.173	+ 4.602	
					23	-39.781	+32.247	64 3648	8.7	11	-20.464	+48.217				9	- 1.729	+45.538	
					19	-39.610	+43.132	64 3650	9.9	9	-20.434	+26.646				9	- 1.707	+ 7.125	
					9	-39.152	+39.020			15	-20.272	+58.759				20	- 1.668	+43.380	64 3658 9.6
					23	-39.016	+15.606	64 3649	8.8	9	-19.657	+54.489				10	- 1.144	+34.242	
					10	-38.935	+ 4.436			13	-19.386	+42.669				10	- 1.273	+ 1.701	
					20	-38.848	+34.963	64 3651	9.9	16	-19.020	+28.076				13	- 0.907	+11.070	
					71						131						191		
					11	-38.789	+55.209			22	-18.568	+38.490	64 3654	9.2		15	- 0.899	+14.504	64 3659 9.9
					9	-38.611	+18.536			11	-17.933	+ 2.995				12	- 0.819	+20.793	
					9	-38.126	+ 5.631			9	-17.534	+22.425				10	- 0.314	+52.533	
					9	-38.118	+ 7.492			10	-17.444	+16.164				12	+ 0.201	+ 5.041	
					10	-37.894	+64.292			12	-16.541	+35.807				15	+ 0.443	+ 5.529	
					9	-37.741	+24.535			10	-16.418	+22.472				9	+ 0.637	+13.310	
					12	-37.703	+42.640			11	-15.926	+53.691				12	+ 0.834	+50.575	
					9	-37.193	+30.782			11	-15.825	+34.243				12	+ 0.912	+ 2.776	
					10	-36.718	+10.935			10	-15.413	+44.748				10	+ 2.021	+ 9.353	
					15	-36.188	+41.276			9	-15.366	+49.256				9	+ 2.869	+37.790	
					81						141						201		
					13	-35.737	+30.223			18	-15.138	+50.961	64 3655	9.9		9	+ 2.898	+48.515	
					10	-35.519	+ 3.530			10	-15.062	+17.248				9	+ 3.490	+12.749	
					15	-35.453	+ 4.886			10	-14.171	+ 6.518				9	+ 3.838	+ 7.775	
					11	-35.440	+30.110			10	-13.835	+15.737				11	+ 4.031	+30.277	
					10	-35.435	+24.343			14	-13.819	+41.030				9	+ 4.082	+56.471	
					9	-35.190	+52.516			10	-13.339	+ 2.630				16	+ 4.228	+10.520	
					13	-35.129	+29.779			10	-13.304	+ 6.348				11	+ 5.257	+34.818	
					12	-34.880	+34.121			13	-13.098	+ 1.708				14	+ 5.262	+25.553	
					18	-34.869	+57.401			11	-12.740	+29.616				14	+ 5.738	+51.862	
					9	-34.862	+34.651			9	-12.456	+29.293				14	+ 6.187	+57.917	
					91						151						211		
					10	-34.731	+47.808			10	-12.160	+21.794				10	+ 6.340	+30.531	
					9	-34.709	+23.666			12	-12.120	+10.058				19	+ 7.035	+51.059	
					9	-34.309	+62.250			9	-11.448	+64.846				10	+ 7.353	+18.448	
					9	-33.164	+37.569			11	-10.968	+34.715				11	+ 8.193	+40.318	
					9	-33.024	+36.939			10	-10.410	+61.242				34	+ 8.717	+12.818	64 3660 8.4
					11	-32.729	+13.280			10	-10.256	+18.010				14	+10.059	+40.381	
					10	-32.724	+59.799			14	-10.153	+ 1.810				12	+10.091	+54.188	
					14	-32.357	+27.105			14	- 9.417	+54.595				9	+10.922	+59.830	
					17	-32.229	+24.772			11	- 8.568	+12.084				11	+11.189	+44.005	
					13	-31.962	+42.532			20	- 8.356	+ 5.183	64 3656	9.6		9	+11.810	+60.941	
					101						161						221		
					14	-31.835	+55.864			11	- 8.195	+29.809				9	+12.186	+ 4.845	
					16	-30.661	+ 2.464			20	- 8.149	+28.627	64 3657	9.9		11	+12.585	+52.396	
					10	-30.157	+47.847			12	- 8.059	+51.411				9	+12.602	+30.437	
					9	-29.833	+39.575			14	- 8.035	+ 3.644				9	+13.266	+28.231	
					12	-29.017	+31.225			12	- 7.444	+49.526				13	+14.530	+ 1.660	
					9	-28.652	+48.220			14	- 7.128	+33.405				24	+15.564	+51.295	64 3661 8.8
					12	-28.627	+33.439			11	- 6.730	+ 0.017				10	+15.762	+60.013	
					10	-28.218	+34.487			11	- 6.448	+32.673				12	+16.063	+32.454	
					9	-27.804	+46.656			9	- 6.067	+59.017				12	+16.377	+33.335	
					14	-27.177	+30.751			9	- 5.921	+31.313				16	+16.425	+28.601	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
I3	+16.759	+29.093			I3	+35.517	+31.835			I0	-57.261	-14.948			9	-35.191	-37.798		
9	+16.872	+37.295			II	+36.875	+38.462			I0	-57.028	-2.960			I2	-34.211	-14.448		
I3	+17.312	+41.902			I4	+37.190	+9.852			I6	-56.676	-11.418	65 3459	9.9	II	-33.982	-14.186		
II	+17.364	+22.957			I2	+38.667	+25.535			I2	-56.561	-59.494			II	-33.979	-33.776		
9	+18.761	+34.069			20	+38.829	+31.954			I4	-56.394	-58.774	65 3457	9.4	I3	-33.775	-34.549		
70	+18.788	+19.585	64 3662	5.6	I3	+40.112	+22.681			I6	-56.389	-26.786			32	-32.025	-48.723	65 3468	8.4
I0	+19.190	+63.563			II	+41.697	+28.836			9	-55.857	-30.927			I6	-31.980	-51.299		
I4	+19.307	+18.356			II	+42.338	+10.370			9	-55.542	-45.121			II	-31.850	-24.021		
II	+19.431	+21.453			I6	+43.057	+24.248			34	-55.241	-57.586	65 3458	8.2	II	-31.717	-27.730		
I0	+19.520	+22.039			I0	+43.481	+24.272			I0	-54.346	-3.002			I8	-31.641	-41.391		
	241					301					361					421			
I0	+20.113	+52.488			I2	+45.564	+1.117			I4	-54.178	-0.726			9	-31.357	-42.507		
49	+20.218	+43.708	64 3663	7.2	I6	+46.044	+33.122			I0	-53.891	-21.491			I2	-30.736	-6.958		
II	+20.665	+33.740			II	+46.872	+9.369			I4	-53.699	-44.044	65 3461	9.9	II	-29.620	-62.580		
9	+21.043	+5.957			50	+48.508	+43.666	64 3670	7.2	I8	-53.471	-50.947	65 3460	9.2	I2	-28.528	-7.351		
9	+21.196	+14.436			I8	+48.711	+8.987	64 3671	9.9	9	-53.171	-59.664			I2	-28.385	-4.202		
9	+21.392	+9.445			9	+49.288	+22.237			9	-52.230	-32.996			9	-28.071	-18.717		
9	+21.645	+22.474			I0	+49.292	+17.943			9	-51.658	-19.210			I0	-27.600	-44.405		
22	+21.681	+53.583	64 3664	9.0	I4	+49.628	+54.728			I0	-51.575	-29.980			I3	-27.551	-4.843		
I3	+21.865	+44.716			9	+50.385	+13.758			II	-51.526	-32.481			II	-27.418	-13.750		
II	+22.226	+14.633			I5	+50.450	+14.423			I2	-51.521	-5.838			I6	-27.370	-47.880	65 3469	9.6
	251					311					371					431			
I3	+22.307	+44.160			I4	+50.953	+34.284			22	-51.505	-36.178	65 3462	9.0	II	-26.191	-31.351		
I3	+22.396	+25.627			II	+51.436	+37.634			9	-51.125	-28.609			I8	-25.983	-35.365	65 3470	9.6
9	+22.541	+46.822			I0	+52.876	+16.172			9	-50.336	-15.445			I8	-25.378	-28.256		
9	+23.098	+17.694			I3	+52.909	+3.623			I6	-50.028	-16.310			9	-25.301	-51.601		
I0	+23.697	+25.965			9	+53.925	+44.628			9	-49.728	-11.938			I2	-25.104	-17.445		
9	+23.709	+41.619			I4	+54.519	+59.972			9	-48.219	-29.458			I0	-24.504	-15.711		
I4	+23.711	+64.662			I2	+55.542	+45.199			I0	-47.806	-16.138			I0	-24.437	-26.546		
9	+24.017	+6.305			I5	+56.212	+0.330	64 3673	9.7	I2	-47.795	-28.632			I0	-24.310	-33.493		
I6	+24.344	+38.082			I0	+56.273	+51.378			I2	-47.014	-21.077			I4	-24.098	-19.022		
II	+25.701	+35.367			I2	+56.514	+3.771	64 3674	9.9	I2	-46.721	-8.657			I3	-23.725	-48.897		
	261					321					381					441			
I5	+26.343	+6.590			I0	+56.658	+50.024			9	-46.592	-29.078			I7	-23.330	-27.378		
I2	+26.364	+31.979			I4	+56.689	+35.097	64 3672	9.4	I2	-46.327	-16.332			I0	-23.304	-34.569		
I5	+26.707	+35.522			I4	+56.968	+52.161			I0	-46.136	-13.940			I4	-23.251	-38.371		
I2	+26.735	+18.025			I0	+57.285	+10.995	64 3676	10.3	I3	-45.979	-64.446			I0	-22.580	-43.383		
9	+26.805	+1.932			I4	+57.573	+61.922	63 4146	9.5	9	-45.839	-1.999			I3	-22.260	-12.720		
21	+27.220	+59.033	64 3666	9.4	II	+57.835	+41.613	64 3675	10.2	I5	-45.053	-15.750			9	-21.931	-56.388		
9	+27.666	+25.303			I5	+58.420	+33.346	64 3678	9.2	9	-44.842	-58.794	65 3463	8.9	I0	-21.335	-0.827		
9	+27.993	+43.661			9	+58.504	+33.397	64 3677	10.3	25	-44.501	-49.801			9	-20.940	-54.657		
9	+28.319	+51.321			I0	+58.755	+43.202			II	-43.917	-63.577			I6	-20.379	-6.608		
I8	+28.413	+8.818			9	+59.178	+26.374			9	-43.815	-39.440			9	-19.637	-11.965		
	271					331					391					451			
II	+29.162	+27.576			28	+59.335	+11.063	64 3680	8.5	20	-43.712	-28.283	65 3464	9.5	9	-19.074	-13.885		
20	+29.606	+27.313			I5	+59.688	+39.325	64 3679	9.4	I0	-42.847	-7.697			9	-17.154	-18.422		
I0	+30.094	+30.855			I5	+60.971	+14.101	64 3682	9.0	II	-42.504	-39.818			I5	-16.973	-19.728	65 3471	9.8
9	+30.696	+58.068			9	+61.571	+37.638	64 3681	10.3	42	-42.191	-56.816	65 3465	7.4	I4	-16.897	-49.686		
9	+30.889	+43.146			I0	+62.181	+25.660	64 3683	10.3	II	-40.908	-15.312			I6	-15.560	-52.177		
II	+30.930	+29.150			I0	+62.516	+3.703	64 3684	10.2	9	-40.686	-48.041			31	-15.209	-48.649	65 3472	8.5
II	+31.381	+30.732			I4	+63.323	+25.790	64 3685	9.8	II	-39.841	-25.518			9	-15.062	-29.743		
II	+31.606	+54.879			I8	+63.655	+5.910	64 3688	9.1	II	-39.472	-19.298			I7	-14.933	-21.679	65 3473	9.6
I0	+32.061	+45.380			I2	+63.671	+33.910	64 3686	9.9	24	-38.712	-32.620	65 3466	9.0	I0	-14.677	-1.478		
I6	+32.501	+60.377			49	+64.155	+23.650	64 3687	7.9	9	-38.470	-27.560			9	-14.658	-14.114		
	281					341					401					461			
II	+32.514	+1.391			I8	-64.976	-26.368	65 3454	9.3	I2	-38.274	-46.721			I0	-14.551	-41.690		
9	+32.539	+18.669			I4	-64.032	-38.868	65 3455	9.9	I4	-37.965	-43.577			9	-14.524	-50.416		
9	+32.590	+27.151			I2	-63.673	-46.262			I4	-37.890	-51.448			I2	-13.645	-7.411		
26	+32.668	+58.765	64 3667	9.0	II	-62.432	-8.907			I6	-37.840	-47.919			9	-12.021	-44.398		
I9	+33.058	+3.364	64 3668	9.3	I0	-61.155	-38.930			II	-37.374	-37.581			I3	-11.733	-7.279		
I0	+33.360	+33.890			9	-60.885	-43.818			9	-36.822	-38.222			9	-11.746	-27.829		
9	+33.446	+33.788			I0	-60.862	-0.801			I0	-36.634	-54.979			22	-11.675	-1.214	65 3474	8.7
I0	+33.482	+56.973			I4	-59.414	-26.052			II	-36.618	-38.678			9	-11.565	-22.312		
22	+33.618	+20.943	64 3669	9.0	I4	-58.387	-44.456	65 3456	9.8	II	-36.195	-28.258			27	-11.263	-16.334	65 3475	8.6
I5	+34.705	+9.351			I4	-57.782	-12.369			28	-35.507	-35.674	65 3467	8.8	9	-10.881	-63.036		

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
PLATE CENTRE.																				
17h 51m, - 65°.																				
Plate 3947. 1915, July 13.																				
PROVISIONAL CONSTANTS.																				
a = - .01139 d = - .00077																				
b = + .00115 e = - .01139																				
c = + .1856 f = + .0075																				
To obtain standard co-ordinates, ξ, η																				
$\xi = x + ax + by + c$																				
$\eta = y + dx + ey + f$																				
20	471,	-10.841	- 9.130	65 3476	9.6	II	531,	+17.342	-25.572	13	591,	+36.904	-23.593		9	-64.829	+44.158			
17		-10.258	-14.475	65 3477	9.9	17		+17.456	-29.707	13		+38.012	- 0.871		9	-63.830	+15.692			
11		- 9.781	- 5.699			10		+17.985	- 1.995	11		+38.711	-22.241		11	-63.245	+44.828			
16		- 9.671	-51.275			10		+18.047	-41.931	11		+39.189	-51.372		9	-62.949	+51.051			
24		- 9.364	-28.620	65 3478	8.7	11		+18.636	-42.432	9		+39.340	-23.052		12	-62.887	+ 3.175			
12		- 8.903	-59.140			11		+19.163	-13.042	9		+39.702	-28.334		13	-62.420	+61.652	63 4146	9.5	
18		- 8.124	-64.510	66 3131	9.9	9		+19.163	- 3.911	9		+40.278	-59.206		10	-62.329	+51.868			
18		- 7.536	-20.945	65 3479	9.9	10		+19.276	- 1.033	9		+40.279	-21.627		15	-61.366	+34.827	64 3672	9.4	
20		- 7.305	-63.602	66 3132	9.5	10		+19.467	-41.016	9		+40.279	-21.627		11	-60.718	+41.406	64 3675	10.2	
15		- 7.045	- 3.276			11		+19.541	-11.366	10		+40.291	-32.740		11	-59.888	+43.066	64 3677	10.3	
11	481	- 7.013	-32.851			13	541	+19.597	- 1.479	9	601	+41.150	-49.036							
20		- 6.753	-38.125	65 3480	9.3	10		+20.063	-40.250	9		+41.278	-38.415		16	-59.533	+33.229	64 3678	9.2	
11		- 6.406	-15.206			9		+20.063	-40.250	9		+41.431	-55.888		9	-59.460	+33.476			
20		- 6.297	-13.651	65 3481	9.3	9		+20.238	- 9.344	9		+42.323	-56.616		14	-59.364	+ 0.123	64 3673	9.7	
12		- 5.990	- 3.153			10		+20.544	- 4.082	9		+42.539	-58.400		12	-59.300	+ 3.588	64 3674	9.9	
						11		+21.270	- 9.507	9		+42.540	-38.116		10	-59.047	+10.848	64 3676	10.3	
9		- 5.403	-39.575			22		+21.644	-64.861	16		+42.576	- 1.986		15	-58.698	+39.287	64 3679	9.4	
12		- 5.230	-64.996			11		+21.688	-14.292	9		+42.852	-29.631		10	-58.255	+26.310			
14		- 4.788	-62.638			11		+21.741	-21.181	11		+43.057	-11.932		9	-57.503	+ 8.203			
16		- 4.774	-11.310			9		+22.728	-15.058	9		+43.078	-35.418		30	-57.015	+11.058	64 3680	8.5	
9		- 3.963	-53.178			10		+22.986	-17.082	10		+43.111	-22.232		10	-56.701	+37.713	64 3681	10.3	
12	491	- 3.645	-64.535			11	551	+23.147	- 3.291	9	611	+43.366	- 4.122		14	-55.609	+14.205	64 3682	9.6	
14		- 3.074	-64.825			11		+23.738	-10.834	13		+43.379	-11.602		11	-55.225	+25.824	64 3683	10.3	
9		- 2.794	-57.305			12		+23.835	-10.774	9		+44.683	-24.394		9	-55.218	+ 7.259			
11		- 1.815	-29.005			9		+24.177	-59.123	18		+45.335	-47.278	65 3488	9.6	9	-54.772	+36.057		
9		- 1.697	- 8.525			9		+24.187	- 1.254	19		+45.720	- 3.057		12	-54.323	+34.164	64 3686	9.9	
10		- 0.265	-18.671			12		+24.230	-25.057	16		+46.261	-43.414	65 3489	9.8	14	-54.116	+26.024	64 3685	9.8
12		+ 0.050	-10.404			9		+24.718	-16.496	10		+47.373	- 1.861		10	-58.255	+26.310			
12		+ 0.427	- 7.557			20		+24.745	- 0.144	13		+47.379	- 8.818		9	-57.503	+ 8.203			
11		+ 1.278	-46.242			11		+24.800	-23.151	11		+47.519	-21.407		30	-57.015	+11.058	64 3680	8.5	
13		+ 1.457	-43.749			9		+25.820	-13.184	9		+47.629	-12.296		10	-56.701	+37.713	64 3681	10.3	
	501					11	561	+25.878	- 5.931	22	621	+47.629	-19.714	65 3490	9.2	14	-55.609	+14.205	64 3682	9.6
9		+ 1.757	- 9.587			11		+26.416	- 7.713	9		+49.628	-56.949		11	-55.225	+25.824	64 3683	10.3	
23		+ 2.705	-10.774	65 3482	9.0	20		+26.843	- 1.334	11		+50.800	-10.554		9	-55.218	+ 7.259			
9		+ 2.894	-48.176			10		+27.672	-51.762	12		+50.903	-60.210	65 3492	9.9	9	-54.772	+36.057		
9		+ 2.902	- 2.446			10		+27.678	-31.337	16		+51.219	-33.526	65 3491	9.9	12	-54.323	+34.164	64 3686	9.9
16		+ 4.155	-56.199			9		+27.831	-46.205	10		+52.478	- 8.057		14	-54.116	+26.024	64 3685	9.8	
9		+ 4.656	-36.261			19		+29.102	- 3.024	13		+52.738	-40.621	65 3494	9.5	11	-53.312	+ 3.946	64 3684	10.2
16		+ 4.866	- 8.471	65 3483	9.9	11		+29.541	- 2.610	12		+52.989	-26.570	65 3493	10.2	39	-53.126	+23.952	64 3687	7.9
12		+ 6.202	-20.842			22		+29.585	-48.928	12		+53.533	-37.695	65 3495	9.9	9	-53.010	+61.125		
9		+ 6.308	-24.375			11		+30.202	-20.477	11		+55.284	-20.053		19	-52.333	+ 6.233	64 3688	9.1	
	511						571				631									
16		+ 6.631	-12.409			10		+31.563	-12.206	12		+55.811	-32.402	65 3497	9.9	9	-51.294	+ 3.488		
9		+ 7.157	- 5.133			10		+31.597	-49.890	9		+56.221	-11.666		12	-51.292	+16.790	64 3689	10.0	
12		+ 8.082	-44.192			12		+31.705	-12.057	11		+56.564	- 3.115	65 3496	10.3	9	-51.017	+18.837		
9		+ 8.253	-40.409			9		+31.970	-39.125	9		+59.522	-16.819		13	-50.563	+36.139	64 3690	10.0	
11		+ 8.314	-17.751			9		+32.293	- 9.119	16		+59.751	-39.105	65 3499	9.2	10	-48.775	+38.182	64 3691	10.3
9		+ 9.449	-26.280			12		+32.371	- 6.167	11		+60.221	-30.399	65 3500	10.3	9	-48.522	+ 0.900		
9		+ 9.566	-36.475			10		+32.409	- 7.727	15		+60.521	-12.423	65 3498	9.6	9	-48.232	+55.628		
10		+ 9.567	- 9.619			9		+32.515	-27.326	9		+61.166	-17.202	65 3501	10.3	13	-47.505	+57.746	64 3693	9.8
10		+ 9.667	-40.422			38		+32.765	-32.447	13		+61.202	-62.777	66 3147	9.4	13	-47.454	+23.983	64 3692	9.7
11		+ 9.735	-20.419			16		+33.167	-10.675	12		+61.355	-60.725	65 3503	9.4	10	-47.422	+40.207		
	521						581				641									
9		+10.415	-53.841			18		+33.195	- 4.049	12		+62.015	-14.637	65 3502	9.9	10	-47.284	+ 8.505		
10		+10.862	-35.681			11		+33.266	-40.504	16		+63.121	-62.321	65 3504	9.0	43	-47.008	+64.120	63 4155	7.4
18		+11.387	-36.743	65 3484	9.6	10		+34.081	-11.961	9		+63.717	-48.977	65 3505	10.3	9	-46.869	+36.541		
14		+11.488	-60.520			9		+34.515	-13.488	9		+64.080	-37.368		18	-46.004	+46.046	64 3694	9.5	
9		+12.780	-37.814			9		+34.581	- 2.847	9		+64.082	- 1.572		9	-45.951	+16.673			
11		+13.955	- 6.080			16		+34.957	- 1.843	14		+64.743	-24.254	65 3506	9.7	10	-45.772	+59.895	63 4157	10.3
9		+14.111	-39.504			9		+35.639	-14.706	54		+64.850	-29.126	65 3507	7.8	11	-44.717	+28.534	64 3695	10.3
10		+14.148	-45.868			10		+36.488	-43.934	10		+64.856	-26.916		9	-44.102	+19.329			
10		+14.231	-25.035			9		+36.498	-23.881						10	-41.457	+11.716			
12		+15.751	-37.792			10														

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				N	Mag.
	51,					111,					171,					231,			
9	-40° 844	+64° 764			10	-20° 834	+0° 790			14	-2° 244	+26° 670	64 3737	10° 0	12	+14° 737	+22° 689	64 3767	10° 2
10	-40° 133	+12° 648			9	-20° 504	+28° 603			9	-2° 174	+44° 852			9	+14° 755	+31° 470		
9	-40° 120	+22° 830			11	-20° 158	+20° 812			16	-2° 089	+30° 670	64 3738	9° 6	9	+15° 122	+57° 400		
12	-39° 946	+10° 958	64 3697	9° 9	9	-18° 695	+51° 980			15	-1° 920	+58° 501	64 3739	9° 6	23	+15° 288	+50° 074	64 3768	8° 9
12	-39° 188	+37° 708	64 3698	9° 9	16	-18° 636	+20° 916	64 3718	9° 8	9	-1° 763	+38° 239			13	+16° 773	+29° 233	64 3769	9° 9
9	-38° 003	+38° 783			9	-18° 433	+58° 239			13	-1° 071	+4° 763	64 3740	9° 6	9	+16° 909	+0° 578		
13	-37° 945	+51° 801	64 3699	10° 0	9	-18° 255	+9° 229			11	-0° 916	+22° 623	64 3741	10° 2	9	+16° 944	+53° 524		
9	-37° 378	+45° 238			12	-18° 133	+62° 165	63 4193	10° 2	12	-0° 370	+1° 536	64 3742	10° 0	11	+16° 982	+39° 551		
11	-36° 749	+50° 721	64 3701	10° 3	11	-17° 907	+1° 527	64 3720	10° 3	12	+0° 583	+43° 080	64 3744	10° 3	11	+17° 652	+35° 998		
9	-36° 445	+0° 774			13	-16° 945	+37° 708	64 3721	9° 9	13	+0° 593	+23° 068	64 3743	10° 0	9	+17° 820	+45° 368		
	61					121					181					241			
9	-36° 340	+30° 367			18	-16° 394	+23° 516	64 3722	9° 4	11	+0° 737	+32° 799	64 3745	10° 3	9	+18° 881	+7° 920		
9	-36° 109	+43° 006			10	-16° 142	+48° 306			13	+1° 168	+50° 809	64 3746	10° 2	11	+20° 083	+49° 120	64 3771	10° 2
10	-36° 080	+9° 278	64 3700	9° 7	9	-16° 061	+3° 861			9	+1° 362	+24° 817			13	+20° 365	+58° 505	64 3772	9° 8
10	-35° 915	+25° 817			19	-15° 864	+31° 233	64 3723	9° 2	9	+1° 603	+28° 497			10	+20° 543	+42° 947		
13	-35° 155	+51° 358	64 3703	10° 3	10	-15° 441	+29° 012			10	+1° 852	+30° 829			9	+20° 928	+32° 572		
22	-34° 950	+12° 509	64 3702	9° 2	9	-15° 345	+26° 769			9	+2° 244	+43° 696			9	+21° 544	+61° 935		
11	-34° 805	+56° 139	64 3704	10° 3	9	-14° 959	+44° 424			9	+2° 504	+4° 820			12	+21° 717	+35° 775	64 3773	10° 2
10	-34° 830	+4° 204			10	-14° 641	+54° 053			9	+2° 880	+50° 101			10	+21° 732	+30° 421		
10	-33° 927	+23° 520			10	-14° 507	+46° 428			13	+2° 900	+59° 249	64 3747	9° 9	10	+21° 959	+25° 040		
10	-33° 068	+32° 020			9	-14° 439	+23° 900			9	+3° 114	+27° 393			10	+21° 969	+20° 579		
9	-33° 476	+42° 399				131					191					251			
9	-33° 306	+14° 536			11	-14° 009	+2° 230			9	+3° 116	+0° 644			20	+22° 338	+30° 312	64 3774	9° 0
10	-32° 929	+4° 560			9	-13° 994	+15° 584			10	+3° 432	+50° 604			13	+22° 390	+23° 436	64 3776	10° 2
13	-32° 775	+28° 408	64 3705	9° 8	9	-13° 057	+4° 312			11	+3° 501	+45° 006	64 3750	10° 3	12	+22° 487	+55° 559	64 3775	10° 2
10	-32° 274	+41° 024			15	-12° 552	+39° 681			11	+3° 674	+26° 439			9	+23° 229	+30° 334		
					9	-12° 463	+43° 366			11	+3° 703	+28° 075	64 3748	10° 3	11	+23° 407	+62° 036	63 4256	10° 3
10	-31° 328	+30° 781			18	-12° 456	+39° 515	64 3724	9° 0	14	+3° 738	+30° 425	64 3749	10° 0	9	+23° 603	+55° 887		
10	-30° 909	+49° 200			11	-12° 178	+62° 538	63 4200	10° 3	9	+4° 194	+38° 837			10	+24° 304	+40° 724		
13	-30° 674	+55° 075	64 3707	10° 2	11	-11° 872	+62° 706	63 4201	10° 3	13	+4° 444	+50° 943	64 3751	10° 2	11	+24° 317	+63° 588	63 4257	10° 2
9	-30° 496	+14° 090			12	-11° 116	+12° 024	64 3725	10° 2	16	+4° 787	+38° 349	64 3752	9° 4	9	+24° 397	+9° 212		
17	-30° 301	+5° 929	64 3706	9° 4	9	-11° 045	+53° 887			9	+4° 889	+41° 872			10	+26° 369	+16° 239		
	81					141					201					261			
9	-30° 274	+13° 002			13	-11° 036	+47° 225	64 3726	10° 2	12	+5° 464	+48° 522	64 3753	10° 2	13	+26° 384	+22° 103	64 3777	10° 3
11	-30° 045	+46° 335			9	-10° 992	+35° 425			13	+5° 498	+58° 707	64 3754	10° 2	10	+27° 139	+16° 359		
9	-29° 804	+51° 059			9	-10° 950	+14° 886			12	+5° 545	+55° 703	64 3755	9° 9	10	+27° 198	+8° 879		
16	-29° 598	+61° 924	63 4177	9° 1	11	-10° 243	+23° 085			10	+6° 084	+9° 753			9	+27° 298	+7° 189		
11	-29° 234	+16° 028	64 3708	10° 3	11	-9° 196	+44° 752			11	+6° 347	+41° 299			12	+27° 334	+22° 717		
9	-28° 982	+22° 424			10	-8° 984	+54° 328			10	+6° 354	+12° 362			9	+27° 739	+42° 985		
16	-28° 257	+4° 296	64 3709	9° 7	16	-8° 919	+55° 855	64 3727	9° 1	14	+6° 427	+48° 894	64 3756	9° 9	10	+27° 828	+25° 309		
11	-27° 842	+26° 540	64 3710	10° 3	10	-8° 848	+19° 239			12	+6° 737	+3° 896	64 3757	10° 3	9	+27° 929	+44° 234		
12	-26° 068	+21° 092	64 3712	10° 2	10	-8° 722	+31° 067			10	+6° 810	+30° 141			9	+28° 601	+17° 033		
20	-25° 961	+12° 806	64 3711	8° 9	12	-6° 882	+27° 530	64 3728	10° 2	11	+6° 931	+1° 148			10	+29° 133	+31° 258		
	91					151					211					271			
13	-25° 841	+16° 773	64 3713	10° 0	11	-6° 761	+31° 265			20	+7° 116	+5° 155	64 3758	9° 0	9	+29° 700	+29° 523		
9	-25° 769	+26° 640			11	-4° 824	+0° 263			11	+7° 239	+36° 212			9	+30° 159	+11° 173		
11	-25° 757	+16° 868	64 3714	10° 3	10	-4° 742	+47° 250			9	+7° 595	+49° 522			12	+30° 160	+61° 845	63 4266	10° 2
9	-25° 739	+1° 814			12	-4° 773	+44° 732	64 3729	10° 3	11	+8° 530	+28° 029			10	+30° 280	+5° 367		
12	-25° 614	+49° 382	64 3716	10° 0	13	-4° 301	+63° 721	63 4210	10° 0	12	+9° 579	+25° 981	64 3760	10° 0	9	+30° 299	+13° 140		
11	-25° 499	+0° 534			10	-4° 069	+29° 975			14	+9° 602	+43° 631	64 3759	9° 9	9	+30° 666	+63° 326		
13	-24° 976	+11° 780	64 3715	9° 8	16	-3° 989	+28° 171	64 3730	9° 7	9	+9° 865	+52° 476			9	+30° 856	+20° 348		
11	-24° 134	+60° 280	63 4181	10° 3	9	-3° 975	+49° 260			14	+10° 045	+11° 192	64 3761	9° 8	9	+31° 014	+20° 895		
9	-23° 506	+9° 755			9	-3° 906	+44° 801			26	+11° 027	+45° 891	64 3762	8° 5	9	+32° 719	+38° 482		
10	-23° 028	+14° 753			10	-3° 838	+34° 030			11	+11° 934	+37° 312			10	+33° 273	+58° 479		
	101					161					221					281			
10	-23° 020	+26° 687			9	-3° 811	+62° 146			11	+11° 962	+39° 289	64 3763	10° 3	9	+33° 990	+24° 171		
10	-22° 724	+4° 304			9	-3° 641	+32° 668			11	+11° 974	+11° 479	64 3764	10° 2	9	+34° 134	+50° 132		
9	-22° 649	+36° 077			15	-3° 617	+5° 023	64 3731	9° 6	16	+12° 487	+62° 154	63 4231	9° 5	10	+35° 252	+2° 380		
10	-22° 492	+63° 718	63 4187	10° 3	10	-3° 369	+6° 325			22	+12° 831	+62° 911	63 4234	8° 9	20	+35° 744	+54° 886	64 3778	9° 1
18	-22° 485	+33° 830	64 3717	9° 4	10	-3° 220	+49° 862			12	+13° 198	+54° 770	64 3765	10° 2	15	+36° 773	+22° 301	64 3779	9° 8
9	-22° 292	+30° 518			11	-2° 864	+49° 424	64 3733	10° 3	9	+13° 307	+28° 935			12	+37° 076	+17° 349	64 3780	10° 2
10	-22° 272	+16° 482			16	-2° 680	+15° 139	64 3732	9° 5	10	+13° 405	+12° 043			11	+37° 338	+23° 595		
9	-21° 569	+45° 519			18	-2° 570	+48° 001	64 3735	9° 4	10	+13° 473	+25° 819			13	+37° 849	+36° 022	64 3781	10° 0
11	-21° 192	+11° 051			17	-2° 479	+4° 318	64 3734	9° 4	9	+13° 879	+39° 124			11	+37° 870	+25° 301	64 3782	10° 3
11	-21° 046	+50° 583			11	-2° 274	+18° 095	64 3736	10° 3	11	+14° 465	+55° 586	64 3766	10° 3	16	+38° 150	+22° 091	64 3783	9° 7

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
I3	+38°408	+15°382	64 3784	10°2	I6	+62°613	+18°990	64 3817	9°2	I0	-38°644	-19°199	65 3515	9°4	I0	-17°625	-44°350	65 3541	10°3
I3	+38°982	+49°454	64 3785	10°0	9	+62°8.6	+53°909	64 3815	10°3	I6	-38°635	-26°440			II	-17°406	-27°827		
I7	+39°897	+19°105	64 3788	9°2	9	+64°040	+10°577			9	-38°612	-26°314			9	-17°298	-35°241		
I2	+40°006	+10°108	64 3789	9°8	9	+64°244	+8°313			I7	-38°145	-21°957	65 3518	9°2	I4	-16°207	-62°326	66 3175	9°7
II	+40°048	+46°136	64 3786	10°3	I8	+64°963	+47°600	64 3818	9°1	20	-38°100	-3°984	65 3519	9°1	I9	-15°265	-6°434	65 3542	9°4
II	+40°313	+47°770	64 3787	10°3	I8	+64°989	+25°497	64 3819	9°5	I0	-37°807	-28°439			I2	-14°510	-10°581	65 3543	9°9
II	+40°900	+17°741			II	-63°957	-11°120			9	-37°781	-45°523			9	-14°029	-23°824		
I2	+41°932	+23°413	64 3791	10°3	IO	-63°487	-41°690			I2	-36°942	-37°288	65 3520	9°9	9	-13°817	-63°986		
I4	+42°142	+44°968	64 3790	9°9	9	-62°462	-8°501			IO	-36°119	-57°235	65 3521	10°2	I6	-13°396	-10°043	65 3544	9°5
IO	+42°238	+10°652			I6	-61°897	-34°015	65 3491	9°9	II	-35°923	-32°245			I3	-12°781	-16°245	65 3545	9°9
	301					361					421					481			
9	+42°718	+51°333			II	-60°631	-26°940	65 3493	10°2	II	-35°508	-7°423			9	-12°772	-47°006		
I6	+42°780	+21°104	64 3792	9°6	IO	-60°274	-60°647	65 3492	9°9	I4	-35°176	-47°641	65 3523	9°7	IO	-12°577	-37°785		
I3	+43°018	+12°202	64 3793	9°9	I3	-59°867	-40°967	65 3494	9°5	22	-35°010	-56°332	65 3522	9°0	I2	-12°330	-35°886	65 3546	9°9
II	+43°492	+10°956	64 3794	10°3	II	-59°278	-37°981	65 3495	9°9	II	-34°697	-34°793	65 3524	10°3	I2	-12°201	-43°955	65 3547	10°0
IO	+43°634	+44°360			IO	-58°806	-20°268			9	-34°553	-23°545	65 3525	9°9	9	-11°757	-52°702		
II	+43°695	+24°683			II	-58°752	-3°286	65 3496	10°3	I3	-34°477	-23°479			II	-11°364	-54°648	65 3548	10°2
II	+44°240	+6°851			9	-58°487	-11°831			9	-33°775	-44°515			II	-10°905	-22°316		
I2	+45°020	+6°469	64 3797	9°9	I2	-57°394	-32°545	65 3497	9°9	II	-33°336	-33°157	65 3526	10°2	I5	-9°830	-1°946	65 3551	9°7
II	+45°392	+24°061			9	-56°642	-19°022			9	-33°148	-3°295			I4	-9°617	-33°845	65 3550	9°8
42	+45°445	+26°365	64 3796	7°8	II	-54°816	-16°733			9	-31°375	-37°197			II	-9°612	-49°178	65 3549	10°2
	311					371					431					491			
I5	+45°615	+48°332	64 3795	9°2	I5	-54°141	-12°290	65 3498	9°6	IO	-31°246	-57°115			32	-9°328	-62°885	66 3181	8°6
IO	+46°158	+28°352			9	-54°020	-11°848			I3	-31°246	-35°550	65 3527	10°0	I2	-9°141	-5°564	65 3552	10°0
II	+46°971	+48°148	64 3798	10°3	II	-53°156	-17°002	65 3501	10°3	IO	-31°090	-5°144			9	-9°099	-56°934		
IO	+46°976	+1°790			II	-53°136	-30°223	65 3500	10°3	IO	-31°044	-22°962			9	-8°873	-18°092		
I2	+47°108	+54°286	64 3799	9°8	I6	-52°989	-38°952	65 3499	9°2	IO	-30°769	-13°013			IO	-8°588	-12°702		
9	+47°591	+41°292			I3	-52°500	-14°378	65 3502	9°9	9	-30°758	-21°715			IO	-8°506	-23°149		
IO	+48°134	+4°538			IO	-51°368	-1°208			9	-30°210	-2°731			I4	-8°411	-14°049	65 3553	10°0
9	+48°370	+3°293			9	-50°745	-20°139			42	-29°306	-42°385	65 3528	6°9	II	-8°370	-20°597		
9	+48°413	+14°308			9	-50°328	-32°781			21	-28°900	-16°064	65 3529	9°0	9	-8°232	-33°476		
9	+48°492	+43°760			9	-50°029	-20°391			I3	-28°415	-61°755	66 3165	9°6	9	-7°978	-48°179		
	321					381					441					501			
9	+49°236	+30°636			I4	-49°837	-62°447	66 3147	9°4	9	-28°308	-63°014			IO	-7°686	-58°488		
9	+49°497	+41°952			I2	-49°831	-60°391	65 3503	9°4	9	-28°296	-10°922			IO	-6°940	-32°990		
9	+49°932	+23°323			I4	-49°096	-23°769	65 3506	9°7	IO	-25°760	-11°334			9	-6°726	-23°099		
IO	+49°956	+0°886			IO	-48°788	-36°894			9	-25°706	-26°362			II	-6°036	-40°910	65 3555	10°2
I4	+50°535	+62°269	63 4291	9°8	9	-48°768	-12°941			II	-25°217	-2°662			I6	-5°895	-57°996	65 3554	9°5
IO	+50°594	+39°602			IO	-48°765	-26°427			II	-25°120	-30°367	65 3530	10°3	IO	-5°497	-48°441		
IO	+50°788	+22°433			IO	-48°757	-16°771			IO	-24°956	-31°531	65 3531	10°3	9	-5°331	-36°493		
II	+51°209	+0°301	64 3800	10°3	44	-48°626	-28°624	65 3507	7°8	38	-24°631	-5°896	65 3532	8°2	IO	-5°047	-24°139	65 3556	10°3
22	+52°078	+21°861	64 3801	9°0	IO	-48°321	-48°491	65 3505	10°3	II	-24°316	-0°994	65 3535	10°3	9	-4°750	-36°135		
9	+52°786	+35°578			I8	-47°959	-61°859	65 3504	9°0	II	-23°947	-1°520	65 3536	10°3	II	-4°339	-20°464	65 3557	10°3
	331					391					451					511			
I2	+52°898	+49°804	64 3802	9°9	9	-47°031	-48°734	65 3508	10°3	IO	-23°762	-25°336			II	-3°560	-24°820		
II	+53°048	+36°284	64 3803	10°3	9	-46°647	-40°105			9	-23°699	-23°708			IO	-3°518	-34°047	65 3559	10°2
IO	+53°130	+21°045			IO	-46°148	-23°619			I3	-23°546	-44°969	65 3533	9°9	II	-3°428	-46°604	65 3558	9°4
II	+53°326	+36°336	64 3804	10°3	9	-45°613	-30°053			IO	-23°245	-57°111			I7	-3°246	-36°623	65 3560	10°2
II	+54°199	+12°471			IO	-45°446	-25°526	65 3509	10°3	9	-23°238	-55°907			9	-3°218	-18°067		
I2	+54°201	+28°229	64 3806	10°0	I4	-44°601	-21°180	65 3510	9°7	26	-23°206	-53°113	65 3534	9°0	9	-2°699	-34°477		
II	+54°335	+35°542	64 3805	10°2	9	-43°784	-47°942			II	-22°999	-58°902			I6	-2°641	-18°455	65 3561	9°5
I3	+54°439	+25°995	64 3807	10°0	IO	-43°196	-29°923			9	-22°732	-46°736			I2	-2°053	-25°836	65 3562	10°2
I2	+54°931	+8°513	64 3808	10°3	32	-42°738	-52°889	65 3511	8°8	IO	-21°476	-2°676			II	-1°875	-30°165	65 3563	10°3
II	+55°122	+6°856	64 3809	10°3	II	-42°346	-27°810	65 3512	10°3	9	-21°363	-13°069			9	-1°690	-63°048		
	341					401					461					521			
9	+55°344	+0°049			IO	-41°399	-5°417			I3	-21°164	-32°373	65 3538	9°9	9	-1°290	-51°969		
9	+57°290	+45°051			II	-41°239	-8°416	65 3514	10°2	I2	-21°096	-16°609			9	-0°944	-47°499		
II	+57°612	+2°221	64 3812	10°3	IO	-40°844	-7°563			II	-20°919	-58°303	65 3537	10°2	9	+0°249	-31°684		
I5	+58°059	+24°607	64 3810	9°6	I2	-40°437	-36°427	65 3513	10°0	I5	-19°292	-58°838	65 3539	9°5	9	+1°049	-41°161		
IO	+58°345	+35°645	64 3811	10°3	II	-40°332	-32°653			IO	-18°961	-30°366			IO	+1°097	-41°436		
II	+59°200	+20°715	64 3813	10°3	IO	-40°283	-6°485			9	-18°911	-15°766			I7	+1°236	-5°081	65 3564	9°1
I5	+59°831	+0°370	63 4301	9°2	20	-38°931	-11°800	65 3516	8°8	9	-18°668	-24°230			9	+1°509	-4°322		
I2	+61°530	+54°722	64 3814	9°9	I2	-38°800	-11°828			IO	-18°599	-39°379			9	+2°623	-37°080		
9	+62°084	+41°569			I2	-38°679	-14°348	65 3517	10°2	I6	-18°091	-14°334	65 3540	9°6	IO	+2°674	-16°299		
I3	+62°279	+28°469	64 3816	9°8	II	-38°665	-3°660			I2	-18°057	-0°331	64 3719	10°2	IO	+3°197	-24°377		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
PLATE CENTRE.																				
18 ^h 9 ^m , - 65°.																				
Plate 1352. 1895, July 17.																				
PROVISIONAL CONSTANTS.																				
a = - .01129 d = - .00008																				
b = + .00023 e = - .01137																				
c = + .0241 f = + .0408																				
To obtain standard co-ordinates, ξ, η																				
$\xi = x + ax + by + c$																				
$\eta = y + dx + ey + f$																				
9	531,				9	501,				9	651,				10	-64.801	+35.779	64 3803	10.3	
9	+ 3.490	- 1.259			9	+31.071	-50.471			12	+57.253	- 6.566			9	-64.796	+ 7.872			
9	+ 4.380	-37.231			9	+31.239	-10.778			23	+57.580	-38.487	65 3610	10.2	22	-64.764	+21.330	64 3801	9.0	
10	+ 4.505	-40.220	05 3565	9.0	12	+31.735	- 8.293	65 3590	10.0	21	+58.204	-45.225	65 3611	8.8	10	-64.543	+35.839	64 3804	10.3	
18	+ 4.505	-20.983	05 3566	9.2	10	+33.321	-36.156			12	+59.855	- 8.586	65 3612	8.9	9	-64.347	+39.113			
12	+ 4.853	-62.110	65 3203	10.2	12	+33.575	-34.851	65 3591	10.3	11	+59.908	-44.503	65 3614	9.8	9	-64.003	+24.068			
9	+ 5.758	-22.117			11	+34.154	-38.959			11	+60.625	-11.431	65 3613	10.3	9	-63.661	+20.589			
25	+ 0.101	-60.747	05 3567	9.0	11	+34.605	-24.452			20	+60.676	-46.487	65 3616	9.1	12	-63.478	+35.103	64 3805	10.2	
10	+ 0.430	-15.724			13	+35.218	- 1.831	65 3592	9.9	12	+60.855	-59.671	65 3617	9.8	9	-63.187	+62.576			
15	+ 0.985	- 6.882	65 3568	9.5	11	+35.798	-40.170	65 3593	10.3	18	+61.279	-15.409	65 3615	9.0	11	-63.094	+27.827	64 3806	10.0	
12	+ 7.103	-14.050	05 3569	10.0	10	+36.887	-34.822			10	+61.738	-36.857	65 3618	10.3	11	-62.704	+25.615	64 3807	10.0	
10	541				11	601				9	661				15	-62.032	+19.856			
11	+ 7.781	- 0.372			19	+36.958	-46.786	65 3594	9.0	13	+61.810	-24.436			9	-61.997	+12.112			
9	+ 8.938	-40.196			10	+37.134	-59.536			9	+62.407	-41.583	65 3619	9.6	9	-61.436	+16.265			
9	+ 9.330	-57.003			10	+37.138	-34.940			9	+62.548	-22.998			9	-61.204	+44.810			
10	+ 9.412	-20.328			9	+37.138	-34.940			11	+63.601	-34.225	65 3620	10.2	12	-60.982	+ 8.217	64 3808	10.3	
10	+ 9.538	-50.380			10	+37.271	-54.647			11	+63.656	- 1.733			10	-60.671	+ 6.561	64 3809	10.3	
9	+10.359	-41.569			10	+37.301	-44.288			11	+64.130	-22.482	65 3621	10.2	9	-60.532	+61.776			
9	+10.648	-51.767			9	+38.200	- 9.702			9	+64.242	-20.382			9	-60.427	+28.241			
11	+11.703	- 5.261	65 3570	10.2	11	+38.540	-17.013	65 3595	10.3	10	+64.476	-40.995	65 3622	9.9	19	-59.973	+63.664	63 4301	9.2	
13	+12.743	- 2.405	65 3571	9.9	11	+39.171	-17.428	65 3596	10.3	9	+64.559	-54.964	65 3623	10.3	10	-59.500	+35.499	64 3811	10.3	
11	+12.772	-55.957			9	+39.594	-32.482			9					9	-59.468	+37.753			
9	551				10	+39.943	-29.063			9					9	-59.280	+44.205			
9	+13.550	-35.583			27	611				9					18	-59.002	+24.481	64 3810	9.6	
9	+13.773	-25.590			10	+40.191	-32.348	65 3597	8.4	10					10	-58.849	+ 6.437			
9	+13.954	-20.739			10	+40.404	-41.467			9					9	-58.749	+32.253			
12	+15.229	-13.508	65 3572	10.3	11	+40.483	-16.397			9					9	-58.298	+38.113			
40	+15.620	- 5.561	65 3573	7.8	14	+40.786	- 5.729	65 3598	9.7	9					9	-58.252	+36.035			
12	+15.794	-25.101	65 3574	10.2	9	+41.160	- 1.271			9					9	-58.134	+31.277			
12	+17.751	-57.489	65 3575	10.2	10	+41.519	-57.529	65 3599	10.3	9					12	-57.862	+ 2.114	64 3812	10.3	
9	+17.886	-28.085			11	+42.516	- 8.999			9					17	-57.653	+54.759	64 3814	9.9	
12	+17.937	- 0.085	64 3770	10.0	11	+42.580	-42.630	65 3600	10.2	9					13	-57.592	+20.669	64 3813	10.3	
10	+18.589	-47.021			9	+42.881	-21.975			9					9	-57.482	+57.258			
9	561				11	+43.281	-19.591			9					9	-57.244	+ 7.697			
9	+19.268	-21.785			10	+44.132	-12.973			9					9	-57.023	+27.218			
12	+20.574	- 8.701	65 3576	9.9	9	+44.780	-38.567			9					9	-56.296	+54.007	64 3815	10.3	
22	+20.740	-47.625	65 3577	9.0	9	+44.780	-38.567			9					9	-56.168	+41.675			
10	+21.454	-34.109			9	+44.854	-28.751			9					9	-56.162	+22.359			
10	+23.089	-23.749			13	+44.938	-64.166	66 3234	9.6	9					9	-55.749	+14.734			
12	+23.122	- 3.228			10	+45.088	-34.782			9					9	-55.240	+21.269			
12	+24.035	- 9.479	65 3578	10.2	10	+45.531	-30.520			9					9	-55.135	+53.327			
18	+24.512	-30.440	65 3579	9.0	9	+45.697	- 0.385			9					15	-55.043	+28.630	64 3816	9.8	
14	+24.685	-17.056	65 3580	9.9	10	+45.749	-12.189			9					9	-54.737	+46.546			
9	+25.418	-19.432			11	+45.775	-31.019	65 3601	10.3	9					10	-54.529	+61.522			
10	571				11	+46.072	-43.707	65 3602	10.0	9					9	-54.495	+14.390			
10	+26.083	-42.510			12	+46.279	-11.004			9					9					
9	+26.169	-59.750			9	+46.512	-12.957			9					9					
10	+26.171	-17.774			22	+47.474	-19.816	65 3603	8.9	9					9					
12	+26.196	-24.251			9	+48.204	-23.267			9					9					
9	+26.427	- 9.825			9	+48.217	- 6.527			9					9					
10	+27.015	- 1.294	65 3581	9.4	14	+48.344	-62.911	66 3243	9.5	9					9					
18	+27.658	-29.874	65 3582	9.2	11	+48.743	- 6.577			9					9					
11	+28.152	-33.083	65 3583	10.3	9	+49.197	-57.487			9					9					
9	+28.500	- 6.303			9	+49.705	-28.502			9					9					
12	+29.474	-23.675	65 3586	10.2	11	+50.073	-36.991	65 3604	10.0	9					9					
19	581				11	641				9					9					
19	+29.640	-10.340	65 3585	9.0	14	+50.329	-59.786	65 3605	9.8	9					9					
15	+29.688	- 5.647	65 3584	9.7	10	+51.498	-29.452			9					9					
9	+29.750	- 0.344			9	+51.859	-48.433			9					9					
20	+30.105	- 8.915	65 3587	9.2	11	+52.483	-20.976	65 3606	10.3	9					9					
11	+30.300	-39.487			11	+54.164	-14.408	65 3607	10.3	9					9					
10	+30.387	- 2.405	65 3588	9.4	14	+54.467	-35.921	65 3608	9.6	9					9					
9	+30.511	-30.731			9	+54.659	-25.516			9					9					
9	+30.555	-50.697			18	+55.794	-41.559	65 3609	9.1	9					9					
10	+30.841	-22.629			9	+56.055	-16.877			9					9					
15	+30.947	-47.571	65 3589	9.5	9	+56.860	-26.928			9					9					

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
9	-52.838	+43.434			9	-41.995	+43.328			9	-27.571	+33.621			9	-11.616	+10.878		
9	-52.694	+47.644			10	-41.540	+9.853			13	-27.531	+34.313	64 3837	9.8	11	-11.172	+57.055	64 3852	10.2
9	-52.430	+57.360			9	-41.535	+47.200			9	-27.395	+3.546			10	-11.045	+51.737		
9	-52.253	+11.596			9	-41.510	+25.172			9	-27.327	+60.394			16	-10.655	+40.705	64 3853	9.7
9	-52.203	+37.988			9	-41.262	+0.130			9	-27.216	+64.568			9	-9.784	+39.309		
9	-52.153	+53.043			9	-41.128	+51.523			9	-27.199	+22.068			9	-9.625	+49.118		
18	-52.146	+25.853	64 3819	9.5	9	-40.905	+29.568			10	-26.303	+8.893			17	-9.416	+0.242	64 3854	9.7
9	-52.068	+42.575			10	-40.731	+44.389			9	-26.246	+47.642			9	-9.275	+44.542		
9	-52.050	+10.896			10	-40.661	+14.819			9	-25.654	+41.772			9	-8.881	+44.352		
9	-51.905	+17.323			9	-40.493	+31.025			9	-25.563	+21.684			13	-8.833	+59.955		
	61					121					181					241			
9	-51.834	+3.960			9	-40.402	+64.464			9	-25.020	+30.341			11	-8.593	+54.113		
10	-51.691	+8.658			10	-40.391	+10.115			9	-24.968	+53.293			9	-8.442	+31.203		
18	-51.477	+32.813	64 3820	9.6	14	-40.308	+42.760	64 3828	9.9	9	-24.721	+30.039			9	-8.194	+13.894		
9	-51.384	+41.620			10	-40.303	+57.210			15	-24.513	+9.496	64 3838	10.0	10	-7.393	+26.067	64 3855	10.3
12	-51.145	+25.880	64 3821	10.2	11	-40.040	+22.509	64 3827	10.2	10	-24.494	+11.205			9	-7.225	+53.559		
9	-51.100	+2.734			9	-39.798	+29.015			9	-24.449	+35.973			14	-6.768	+38.226	64 3856	10.0
10	-50.880	+64.261			9	-39.214	+46.700			9	-24.340	+0.774			9	-6.509	+45.840		
9	-50.543	+58.129			9	-39.155	+23.398			16	-24.216	+49.233	64 3839	9.7	9	-6.254	+3.478		
9	-50.400	+41.324			9	-39.137	+54.804			9	-24.025	+42.330			9	-5.171	+46.164		
9	-50.380	+45.466			9	-38.817	+28.009			9	-23.816	+46.434			9	-4.784	+53.991		
	71					131					191					251			
34	-50.141	+27.608	64 3822	8.4	10	-38.421	+5.907			9	-23.497	+41.372			9	-4.739	+29.704		
10	-49.479	+17.741			9	-38.176	+32.459			9	-23.279	+61.262			9	-4.640	+3.766		
9	-49.453	+21.595			9	-38.063	+55.725			9	-23.052	+45.071			10	-4.437	+5.265	64 3857	10.2
9	-49.303	+1.842			10	-37.422	+9.813			9	-22.934	+58.005			10	-4.110	+50.017	64 3858	10.2
9	-49.278	+22.832			10	-37.378	+46.373			18	-22.462	+12.615	64 3840	9.6	10	-3.759	+35.398		
9	-49.262	+42.708			9	-37.342	+57.003			9	-22.216	+62.130			9	-3.253	+11.754		
9	-49.213	+20.075			9	-36.784	+48.070			9	-21.527	+55.039			11	-3.206	+14.339	64 3859	9.9
9	-48.708	+45.102			9	-36.692	+31.259			10	-21.498	+14.801	64 3841	10.3	9	-3.196	+16.795		
9	-48.283	+12.820			9	-36.244	+32.235			11	-21.162	+34.532	64 3842	10.3	9	-2.855	+12.376		
9	-48.269	+44.537			11	-36.105	+3.126	64 3829	10.3	9	-20.658	+62.254			9	-2.792	+42.663		
	81					141					201					261			
9	-47.936	+34.260			9	-35.587	+57.113			13	-20.469	+2.816	64 3843	9.9	10	-1.978	+52.515		
12	-47.671	+58.345	64 3823	10.2	9	-35.341	+2.096			12	-20.403	+43.492			9	-1.585	+14.540		
9	-47.222	+46.490			9	-35.182	+17.713			9	-19.315	+36.715			24	-0.789	+12.532	64 3861	8.9
9	-46.890	+22.060			13	-35.123	+26.867	64 3830	9.9	9	-18.686	+23.352			12	-0.768	+13.734	64 3860	9.8
10	-46.844	+7.933			9	-34.542	+41.434			9	-18.242	+22.581			9	+0.079	+34.483		
9	-46.357	+61.564			10	-34.380	+11.686			10	-18.123	+12.019	64 3844	10.3	10	+0.275	+39.277		
9	-46.319	+41.049			9	-34.322	+54.531			13	-18.113	+44.038	64 3846	10.2	9	+0.397	+47.920		
9	-46.290	+15.913			9	-34.302	+36.279			9	-18.081	+38.116			9	+0.447	+19.751		
9	-46.171	+13.415			19	-34.008	+52.671	64 3831	9.4	12	-18.017	+7.778	64 3845	10.2	9	+1.542	+60.215		
9	-46.136	+55.386			10	-33.942	+54.892			10	-17.791	+64.453			9	+1.561	+30.109		
	91					151					211					271			
9	-45.843	+43.314			20	-33.600	+43.408	64 3832	9.0	9	-17.732	+60.266			20	+1.926	+54.005	64 3862	9.0
9	-45.752	+23.012			9	-33.578	+11.064			9	-16.951	+7.454			10	+2.760	+28.573		
9	-45.472	+62.424			9	-33.070	+64.734			15	-16.948	+52.523	64 3847	9.9	15	+3.099	+51.297	64 3863	9.9
9	-45.184	+21.117			9	-33.033	+20.538			9	-16.902	+53.346			9	+3.299	+16.275		
9	-44.540	+24.313			9	-32.551	+58.619			9	-16.531	+7.096			9	+3.772	+54.115		
9	-44.459	+19.779			10	-32.405	+51.579			10	-16.448	+59.806			10	+4.464	+21.007	64 3864	10.2
17	-44.227	+33.545	64 3824	9.8	19	-31.562	+17.004	64 3833	9.1	11	-15.678	+28.457	64 3848	10.0	10	+4.740	+62.553		
10	-44.194	+63.076	63 4314	10.3	9	-31.163	+51.197			20	-15.462	+27.659	64 3849	9.4	12	+5.317	+58.167	64 3865	10.3
9	-44.183	+58.676			15	-31.120	+40.867	64 3834	9.8	18	-15.306	+50.370	64 3850	9.6	9	+5.477	+33.830		
9	-44.150	+44.126			9	-30.686	+37.732			9	-14.751	+0.660			9	+5.749	+13.961		
	101					161					221					281			
9	-44.026	+43.788			9	-30.665	+60.809			9	-14.604	+46.730			10	+6.022	+50.672		
10	-43.902	+43.856	64 3825	10.2	9	-30.596	+13.734			9	-14.205	+42.704			9	+6.051	+16.579		
9	-43.758	+51.553			15	-29.974	+1.968	64 3835	9.8	9	-13.833	+45.127			9	+6.162	+30.976		
10	-43.605	+26.530			10	-29.598	+29.710	64 3836	10.3	9	-13.435	+57.641			19	+7.590	+3.049	64 3866	9.5
9	-43.256	+33.837			9	-29.323	+43.724			9	-12.588	+47.815			10	+7.672	+60.467		
9	-43.095	+46.068			9	-29.025	+10.710			11	-12.403	+14.472	64 3851	10.3	9	+7.815	+6.039		
36	-42.995	+59.780	64 3826	8.3	9	-28.839	+50.362			10	-12.337	+55.109			9	+8.025	+30.560		
10	-42.987	+64.031	63 4317	10.3	9	-28.806	+26.610			10	-12.198	+18.746			15	+8.044	+35.218	64 3867	9.7
9	-42.612	+44.472			9	-28.706	+31.485			9	-12.072	+63.826			9	+8.190	+52.566		
9	-42.226	+52.348			9	-27.819	+37.962			9	-11.752	+7.310			10	+8.515	+47.111		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
9	+ 8° 758	+53° 546			9	+29° 009	+56° 262			9	+47° 387	+ 0° 592			14	-60° 134	-14° 711	65 3607	10° 3
9	+ 9° 738	+37° 830			9	+29° 018	+13° 138			9	+47° 813	+ 2° 973			10	-60° 041	-48° 808		
9	+10° 322	+35° 837			26	+29° 182	+63° 035	63 4391	8° 8	9	+48° 732	+55° 986			10	-59° 976	- 0° 217		
9	+10° 574	+39° 598			9	+29° 259	+18° 259			24	+48° 795	+39° 180	64 3900	8° 8	10	-59° 816	-22° 101		
9	+10° 770	+28° 828			18	+29° 855	+54° 488	64 3882	9° 4	22	+48° 877	+18° 046	64 3901	8° 7	9	-59° 748	- 8° 745		
10	+10° 883	+22° 038			13	+29° 879	+19° 955	64 3883	9° 8	9	+49° 066	+61° 525			10	-59° 151	- 0° 574		
9	+11° 061	+40° 750			9	+30° 170	+63° 043			10	+49° 407	+12° 390			11	-58° 863	-25° 753		
9	+11° 763	+28° 617			9	+30° 838	+26° 873			10	+50° 707	+32° 422	64 3902	10° 3	19	-58° 329	-36° 129	65 3608	9° 6
9	+11° 872	+20° 565			9	+31° 196	+37° 694			9	+50° 781	+ 0° 217			9	-58° 111	-18° 216		
18	+12° 045	+18° 196	64 3868	9° 5	10	+31° 300	+ 0° 702	64 3884	10° 3	9	+51° 177	+28° 128			10	-58° 082	-17° 038		
	301					361					421					481			
9	+12° 526	+ 8° 255			9	+31° 851	+61° 085			15	+51° 586	+54° 210	64 3903	9° 6	11	-57° 620	- 6° 673		
9	+12° 961	+44° 962			9	+31° 886	+16° 043			11	+52° 320	+21° 799	64 3904	10° 3	9	-57° 427	-16° 823		
9	+13° 392	+28° 818			26	+32° 140	+14° 459	64 3885	8° 9	9	+52° 366	+32° 302			18	-56° 621	-41° 669	65 3609	9° 1
9	+13° 990	+29° 975			17	+32° 607	+38° 205	64 3886	9° 7	9	+53° 166	+22° 299			12	-56° 573	-27° 008		
9	+14° 726	+13° 613			9	+32° 700	+56° 891			9	+54° 483	+ 1° 427			9	-55° 453	-27° 325		
15	+14° 778	+ 0° 630	64 3869	9° 6	9	+32° 738	+48° 984			9	+54° 561	+44° 666			14	-55° 049	-38° 477	65 3610	10° 2
9	+15° 022	+27° 368			9	+33° 530	+42° 709			9	+54° 606	+44° 172			9	-54° 878	- 2° 001		
10	+15° 274	+36° 204	64 3870	10° 3	9	+33° 972	+26° 025			9	+54° 651	+58° 984			20	-54° 872	- 8° 593	65 3612	8° 9
9	+15° 379	+24° 874			18	+34° 577	+40° 726	64 3887	9° 5	10	+54° 900	+47° 194			9	-54° 192	-24° 444		
9	+15° 763	+29° 753			18	+35° 020	+16° 911	64 3889	9° 5	9	+55° 465	+12° 928			24	-53° 960	-45° 166	65 3611	8° 8
	311					371					431					491			
12	+15° 956	+ 1° 188	64 3871	10° 2	20	+35° 398	+52° 360	64 3888	9° 0	9	+55° 941	+40° 497			9	-53° 915	-64° 437		
9	+16° 474	+51° 190			9	+35° 912	+11° 520			9	+56° 481	+25° 093			13	-53° 909	-11° 291	65 3613	10° 3
9	+16° 509	+48° 083			9	+36° 056	+48° 020			9	+57° 013	+18° 682			10	-53° 646	-26° 132		
14	+16° 684	+44° 923	64 3873	10° 0	9	+36° 673	+60° 547	64 3890	10° 0	21	+57° 149	+15° 828	64 3905	8° 8	10	-53° 434	-53° 934		
17	+16° 707	+32° 619	64 3872	9° 8	9	+36° 678	+50° 512			9	+57° 281	+38° 198			9	-53° 387	- 9° 103		
9	+18° 532	+41° 391			9	+36° 701	+32° 335			9	+57° 445	+ 0° 748			24	-52° 976	-15° 188	65 3615	9° 0
9	+18° 636	+31° 464			9	+36° 730	+10° 982			9	+57° 585	+41° 538			9	-52° 637	-37° 569		
11	+19° 470	+37° 564	64 3874	10° 2	9	+36° 920	+48° 782			9	+57° 664	+34° 989			15	-52° 315	-44° 333	65 3614	9° 8
9	+19° 733	+ 5° 675			10	+37° 812	+58° 380			9	+58° 088	+26° 311			10	-51° 835	-24° 171		
10	+19° 800	+29° 275	64 3875	10° 3	15	+38° 331	+50° 062	64 3891	10° 0	10	+58° 610	+25° 577	64 3906	10° 3	13	-51° 568	- 1° 388		
	321					381					441					501			
9	+20° 233	+47° 963			9	+38° 465	+23° 351			9	+59° 139	+11° 776			20	-51° 382	-46° 250	65 3616	9° 1
9	+20° 607	+63° 171			15	+39° 812	+ 0° 342	64 3893	9° 8	9	+59° 379	+44° 827			9	-51° 369	-36° 574		
9	+21° 465	+48° 260			9	+40° 027	+21° 802			9	+59° 567	+36° 812			10	-51° 296	-17° 022		
9	+21° 694	+32° 352			20	+40° 305	+20° 875	64 3892	9° 4	28	+60° 685	+37° 151	64 3907	8° 7	15	-51° 183	-22° 687		
9	+21° 774	+16° 268			9	+40° 445	+58° 590			10	+60° 821	+11° 021			13	-51° 019	-36° 565	65 3618	10° 3
9	+22° 483	+22° 837			9	+41° 763	+49° 846			9	+60° 952	+16° 678			14	-50° 293	-59° 378	65 3617	9° 8
9	+22° 485	+13° 912			9	+41° 801	+ 2° 100			10	+61° 456	+24° 201	64 3908	10° 3	9	-50° 091	-39° 417		
9	+22° 704	+19° 065			9	+42° 268	+64° 087			9	+61° 676	+ 3° 103			16	-50° 012	-41° 254	65 3619	9° 6
9	+23° 002	+ 1° 474			9	+42° 653	+ 0° 597			11	+62° 072	+11° 443	64 3909	10° 3	11	-49° 674	-19° 950		
18	+23° 017	+43° 970	64 3876	9° 5	9	+42° 767	+ 1° 661			9	+62° 088	+ 3° 629			15	-49° 638	-22° 051	65 3621	10° 2
	331					391					451					511			
9	+23° 686	+26° 357			26	+42° 868	+60° 248	64 3894	9° 6	9	+62° 675	+38° 021			9	-49° 520	-37° 621		
9	+23° 704	+16° 603			10	+42° 955	+31° 126			9	+63° 118	+18° 960			16	-49° 329	-33° 797	65 3620	10° 2
9	+23° 737	+21° 441			9	+44° 070	+23° 105			10	+63° 325	+25° 896	64 3910	10° 3	11	-48° 902	-23° 559		
16	+24° 246	+15° 438	64 3878	9° 8	9	+44° 123	+18° 849			9	+63° 577	+17° 312			15	-47° 990	-40° 487	65 3622	9° 9
11	+24° 317	+48° 012	64 3877	10° 3	9	+44° 429	+30° 304			24	+63° 839	+26° 985	64 3911	8° 7	9	-47° 434	-17° 018		
9	+24° 392	+10° 506			9	+44° 715	+51° 892			9	+64° 062	+19° 750			9	-47° 167	-26° 135		
9	+24° 469	+37° 400			9	+44° 758	+41° 870			9	-64° 275	-34° 038			9	-47° 142	-24° 319		
9	+24° 872	+33° 415			9	+44° 869	+23° 394			11	-64° 108	- 0° 254			11	-46° 964	-37° 446		
10	+25° 624	+62° 700			9	+44° 945	+31° 698			9	-63° 897	- 0° 408	64 3800	10° 3	11	-46° 939	-54° 407	65 3623	10° 3
9	+25° 738	+42° 125			18	+44° 956	+43° 844	64 3895	9° 8	9	-63° 587	-29° 075			11	-46° 888	-34° 397		
	341					401					461					521			
9	+25° 897	+43° 694			9	+45° 677	+15° 408			13	-62° 620	-37° 509	65 3604	10° 0	9	-46° 718	-32° 455		
9	+26° 453	+60° 325			9	+46° 245	+18° 306			13	-62° 547	-63° 495	66 3243	9° 5	10	-46° 397	-44° 720		
9	+26° 799	+39° 673	64 3879	10° 3	18	+46° 396	+33° 344	64 3898	9° 6	9	-62° 478	- 3° 839			11	-46° 067	-46° 687		
10	+26° 909	+25° 605	64 3880	10° 3	9	+46° 502	+57° 184			9	-62° 435	-61° 483			15	-45° 970	-38° 438		
9	+27° 026	+57° 226			20	+46° 529	+47° 791	64 3896	9° 2	9	-62° 056	-58° 021			10	-45° 849	-18° 389		
9	+27° 347	+44° 316			9	+46° 650	+ 9° 745			11	-61° 748	-29° 891			10	-45° 590	-35° 860		
9	+27° 835	+28° 917			9	+46° 746	+21° 609			14	-61° 347	-21° 382	65 3606	10° 3	9	-45° 082	-43° 567		
40	+28° 258	+34° 770	64 3881	7° 8	18	+46° 914	+45° 330	64 3897	9° 8	9	-61° 209	- 8° 757			11	-45° 046	-10° 368		
9	+28° 263	+ 1° 188			9	+47° 242	+20° 628			10	-60° 846	-36° 084			18	-44° 515	-51° 823	65 3624	9° 2
9	+28° 564	+37° 116			11	+47° 356	+11° 690	64 3899	10° 3	12	-60° 769	-60° 235	65 3605	9° 8	12	-43° 961	- 0° 712		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531,					591,					651,					711,			
12	-43°923	- 5°239			12	-28°441	- 3°528			10	- 6°449	-59°029			18	+17°121	-38°536	65 3668	9°4
10	-43°914	-44°093			30	-27°849	-13°690	65 3640	7°9	19	- 6°066	-39°905	65 1653	9°4	9	+18°443	-19°103		
10	-43°239	- 6°357			9	-27°658	-32°781			11	- 5°968	-38°260			9	+18°556	-60°054		
9	-43°051	-23°731			9	-27°614	-20°305			11	- 4°770	-38°505			9	+18°599	-15°620		
10	-42°544	-16°650			11	-27°422	-21°751			9	- 4°550	-48°284			10	+19°146	-60°176		
9	-41°804	-28°740			11	-27°406	-61°020			9	- 3°559	- 5°738			16	+19°315	-40°317	65 3669	9°9
11	-41°308	-35°256			10	-27°019	-23°713			10	- 2°206	- 6°029			10	+19°434	-28°850		
19	-41°170	-12°042	65 3625	9°4	11	-26°986	-45°503			16	- 2°156	-31°305	65 3654	10°0	14	+20°039	-24°921	65 3670	10°0
10	-41°137	- 9°123			12	-26°816	-45°450			19	- 2°126	- 8°187	65 3655	9°4	10	+21°010	-26°617		
9	-40°682	-23°555			9	-26°331	- 0°414			9	- 0°454	-20°144			11	+21°375	-29°131		
	541					601					661					721			
9	-40°536	-43°439			9	-26°252	-62°653			11	+ 1°362	-55°010			9	+21°547	-64°604		
9	-40°081	-26°266			9	-24°682	-36°403			10	+ 1°556	-13°438			9	+21°635	-16°971		
10	-39°932	-31°231			9	-24°153	- 6°588			15	+ 2°612	-31°131	65 3656	10°2	9	+21°920	-32°953		
9	-39°836	- 4°652			18	-23°095	-39°496	65 3641	9°7	10	+ 3°293	-64°052			18	+22°760	-28°409	65 3671	9°4
9	-39°677	-60°720			14	-22°441	-20°986	65 3642	10°2	12	+ 3°320	-50°309	65 3657	10°3	9	+22°761	-36°981		
10	-39°284	- 2°676			9	-21°659	-39°413			9	+ 4°207	-12°148			13	+23°059	-42°672		
9	-39°226	-33°733			11	-21°543	-31°763			18	+ 4°419	-25°042	65 3658	9°4	14	+23°198	-17°176	65 3672	10°0
11	-38°383	-18°160			11	-20°616	-13°668			18	+ 4°670	-23°817	65 3659	9°4	11	+23°622	-29°771		
11	-38°378	-22°733			10	-20°565	-42°939			20	+ 5°233	-27°991	65 3660	9°0	11	+24°112	-50°215		
9	-38°206	-18°983			11	-20°538	-57°712			10	+ 5°377	-43°730			18	+24°463	-19°895		
	551					611					671					731			
10	-38°140	-48°219			9	-20°399	-22°090			13	+ 5°923	-14°258	65 3661	9°9	9	+25°039	-21°608		
13	-38°048	-44°251			12	-20°016	-28°020	65 3643	10°3	9	+ 6°314	-49°139			9	+25°107	-59°039		
10	-37°526	-50°310			9	-18°819	-13°127			10	+ 7°384	-24°544			9	+25°742	-27°408		
12	-36°710	- 4°094			9	-18°812	-25°819			9	+ 7°629	-63°197			16	+25°778	-14°081	65 3673	10°0
9	-36°517	-62°811			19	-18°766	-57°772	65 3644	9°2	11	+ 7°867	-43°739			9	+25°840	-30°731		
13	-36°389	-45°215	65 3626	10°0	9	-18°330	- 4°917			9	+ 7°965	-64°006			9	+26°088	-13°391		
16	-36°206	-21°849	65 3628	10°2	18	-18°208	-36°753	65 3645	9°6	9	+ 8°313	-48°695			10	+26°318	-26°132		
18	-36°029	-14°649	65 3629	9°0	9	-17°929	- 6°044			18	+ 8°647	-62°807	66 3309	9°6	11	+26°431	-54°119		
18	-35°939	-14°654			16	-17°669	-47°424	65 3646	10°0	11	+ 8°871	-10°401			9	+26°510	- 4°941		
26	-35°937	-45°363	65 3627	8°5	9	-16°992	-48°984			11	+ 9°398	-38°172			9	+26°589	- 6°234		
	561					621					681					741			
9	-35°490	-39°912			18	-16°936	-24°852	65 3648	9°1	9	+ 9°455	-22°309			9	+26°646	-47°140		
10	-35°204	-52°304			15	-16°620	-51°551	65 3647	9°9	10	+ 9°532	-51°028			9	+26°717	-33°291		
9	-34°391	-12°711			9	-15°777	-44°602			12	+ 9°676	-16°670	65 3662	10°2	10	+26°852	-32°171		
14	-34°298	- 2°324	65 3632	10°2	11	-14°937	-15°877	65 3649	10°3	10	+ 9°782	-35°933			14	+27°109	-51°607	65 3675	10°2
10	-34°205	-21°939			9	-14°813	-53°354			12	+10°472	-62°303	66 3312	10°3	12	+27°141	-20°214		
9	-34°147	-16°052			9	-14°749	-22°882			10	+10°801	-24°222			11	+27°215	-16°250		
9	-34°140	- 2°066			9	-14°086	-27°239			9	+10°990	-20°871			19	+27°219	-43°812	65 3674	9°1
10	-34°058	-55°418			9	-13°919	-59°877			10	+11°405	-58°160			20	+27°285	-56°926	65 3676	9°1
11	-33°494	-58°880			11	-13°848	-34°638			9	+11°870	-34°833			17	+27°715	-61°846	66 3327	9°8
15	-33°351	-40°880	65 3631	10°3	19	-13°570	-45°370	65 3650	9°0	9	+12°015	-28°406			9	+28°358	-23°332		
	571					631					691					751			
18	-33°332	-47°229	65 3630	9°9	11	-12°567	-40°504			9	+12°109	-49°151			16	+28°372	- 7°262	65 3677	10°0
9	-33°272	-58°445			11	-12°432	-62°706			9	+12°221	-61°739			9	+29°029	-38°429		
10	-33°160	-57°093			9	-12°159	-52°384			9	+12°257	-61°954			15	+29°085	-37°393		
9	-33°138	-31°283			10	-10°923	-56°301			13	+12°411	-21°634	65 3663	10°3	10	+29°701	-49°537		
17	-32°959	-43°920	65 3633	9°9	12	-10°831	- 9°942			9	+12°683	-45°631			13	+29°921	-30°291	65 3678	10°2
9	-31°969	-10°638			10	-10°410	-52°486			19	+13°421	-61°487	66 3317	8°9	11	+30°031	-62°239		
17	-31°181	-11°914	65 3634	9°7	9	-10°254	-57°193			11	+13°452	-40°411			9	+30°801	-32°543		
9	-31°114	-56°180			10	-10°089	-36°915			11	+13°542	-17°580			12	+31°197	- 1°831	65 3679	10°3
20	-30°624	- 5°249	65 3636	9°0	9	- 8°582	-61°784			19	+13°571	-25°088	65 3664	9°0	10	+31°432	-41°294		
9	-30°402	-35°128			9	- 8°245	-43°096			9	+13°850	-47°377			11	+31°837	- 2°737	65 3680	10°3
	581					641					701					761			
10	-30°039	-16°821			17	- 8°164	-53°553	65 3651	10°0	9	+13°908	-50°790			14	+32°203	-12°174	65 3681	10°3
10	-30°026	-39°563			9	- 8°131	-60°350			9	+14°200	-58°177			9	+32°551	- 3°057		
12	-29°881	-43°564	65 3635	10°3	9	- 7°748	-60°501			9	+14°244	-29°630			10	+32°732	-24°553		
20	-29°864	-11°166	65 3638	9°1	10	- 7°472	-13°342			12	+14°353	-34°325	65 3665	10°3	10	+32°801	-27°698		
9	-29°636	- 6°552			9	- 7°373	-15°446			9	+15°185	-28°798			9	+32°894	-24°347		
14	-29°519	-24°968			11	- 7°137	-53°630	65 3652	10°2	17	+15°613	-50°144	65 3666	9°9	10	+33°617	-32°327		
18	-29°475	- 7°959	65 3639	9°2	9	- 6°799	-48°432			18	+16°244	-37°681	65 3667	9°5	12	+33°674	-17°539	65 3682	10°3
9	-29°408	-28°430			9	- 6°701	-38°233			9	+16°263	-33°563			9	+33°750	-64°462		
20	-20°259	-52°451	65 3637	8°9	9	- 6°614	-59°328			10	+16°652	-29°104			13	+34°182	-37°955	65 3683	10°3
9	-28°482	-38°181			9	- 6°552	-14°299			10	+16°947	-39°432			10	+34°586	-58°050		

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.
	771,					831,				PLATE CENTRE. 18 ^h 27 ^m , - 65°. Plate 1570. 1896, Aug. 12. PROVISIONAL CONSTANTS. <i>a</i> = - .01141 <i>d</i> = + .00003 <i>b</i> = + .00029 <i>e</i> = - .01175 <i>c</i> = + .0519 <i>f</i> = - .0393 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						51,			
9	+34.778	-25.998			11	+49.239	-60.089	65 3697	10.3	9	-46.518	+5.419			9	-46.518	+5.419		
9	+35.392	-63.706			9	+49.650	-17.666			10	-46.422	+5.375			9	-46.242	+9.285		
11	+35.404	-50.110			15	+49.715	-51.476	65 3698	10.2	9	-46.032	+20.518	64 3917	8.7	9	-46.032	+20.518		
9	+35.527	-54.399			16	+50.008	-22.985	65 3696	9.7	9	-45.525	+45.806			9	-45.525	+45.806		
9	+35.772	-21.099			9	+50.379	-29.260												
22	+35.908	-28.816	65 3684	8.7	11	+50.718	-20.830			9	-45.294	+43.444			9	-45.294	+43.444		
18	+36.239	-14.488	65 3685	9.6	12	+50.754	-27.338			9	-45.031	+26.112			9	-45.031	+26.112		
10	+36.407	-21.502			18	+51.093	-24.508	65 3699	9.6	9	-43.884	+40.928			9	-43.884	+40.928		
10	+36.442	-55.019			15	+51.598	-50.163	65 3702	9.9	9	-43.822	+21.799			9	-43.822	+21.799		
9	+36.494	-20.197			16	+51.657	-2.427	65 3700	10.0	9	-43.600	+54.163			9	-43.600	+54.163		
	781					841					61								
9	+36.832	-36.350			14	+51.884	-6.725	65 3701	10.3	10	-64.709	+21.427	64 3904	10.3	9	-42.982	+22.243		
10	+36.805	-3.967			11	+52.112	-6.829			9	-64.004	+43.917			9	-42.372	+35.183		
11	+37.085	-2.116			18	+52.401	-58.610	65 3703	9.1	9	-63.913	+46.929			9	-41.243	+25.586		
11	+37.902	-48.795			12	+52.900	-11.229			9	-63.899	+21.978			13	-41.125	+36.812	64 3918	10.0
10	+38.289	-30.383			12	+53.124	-40.047			9	-62.411	+40.334			9	-40.647	+33.707		
10	+38.439	-47.507			9	+53.132	-14.549			9	-60.941	+12.796			9	-40.439	+12.024		
9	+38.749	-36.890			11	+53.758	-25.317			9	-60.921	+38.131			18	-40.372	+29.156	64 3919	9.5
9	+39.029	-21.649			9	+54.198	-16.738			9	-60.772	+24.991			11	-39.915	+28.939	64 3920	10.3
11	+39.153	-51.728			12	+54.483	-42.443	65 3704	10.2	9	-60.304	+34.955			11	-39.813	+56.714	64 3921	10.3
10	+39.338	-43.278			11	+55.846	-8.264			24	-59.464	+15.809	64 3905	8.8	9	-38.661	+33.071		
	791					851					11								
10	+39.725	-59.128			10	+56.500	-25.427			9	-59.291	+44.900			9	-38.530	+2.864		
9	+39.976	-44.418			9	+56.931	-6.391			9	-59.271	+26.336			9	-38.224	+63.368		
9	+40.406	-9.331			14	+58.424	-14.409	65 3705	10.2	10	-58.707	+25.647	64 3906	10.3	9	-38.184	+33.785		
10	+40.531	-26.230			16	+58.759	-27.526	65 3706	9.9	9	-58.546	+36.913			9	-38.067	+17.091		
10	+40.559	-36.441			9	+59.179	-18.209			9	-58.110	+0.792			16	-37.812	+38.267	64 3922	9.5
9	+40.865	-20.766			15	+59.236	-38.431	65 3707	9.7	32	-57.437	+37.336	64 3907	8.7	9	-36.858	+48.816		
18	+41.912	-25.208	65 3686	9.2	9	+59.470	-23.520			9	-57.191	+11.908			9	-36.485	+18.022		
18	+42.024	-47.766	65 3687	9.4	11	+59.550	-41.148	65 3708	10.3	9	-56.524	+37.571			32	-36.450	+48.823	64 3923	8.6
9	+42.209	-41.134			10	+59.863	-9.380			9	-56.108	+40.942			11	-35.163	+25.641	64 3924	10.3
11	+42.214	-25.077			9	+60.764	-3.586			9	-55.964	+35.907			9	-34.775	+53.585		
	801					861					21								
11	+42.280	-4.245			9	+61.232	-2.554			10	-55.770	+24.473	64 3908	10.3	10	-34.586	+11.634		
10	+42.334	-6.209			19	+61.742	-12.829	65 3709	9.4	9	-55.734	+16.941			10	-34.490	+56.278		
15	+42.378	-44.814			10	+61.808	-27.217			9	-55.502	+38.351			12	-34.302	+54.424	64 3926	10.2
10	+42.582	-53.566			9	+63.354	-0.984			10	-55.459	+11.278			10	-34.129	+57.036		
18	+42.741	-19.359	65 3688	9.4	12	+63.356	-21.470			10	-54.252	+11.784	64 3909	10.3	20	-34.094	+16.184	64 3925	9.0
9	+42.872	-28.044			9	+63.657	-33.689			9	-54.052	+3.438			10	-34.019	+28.861		
11	+43.329	-18.286			9	+64.023	-14.462			11	-54.025	+26.298	64 3910	10.3	11	-33.736	+35.455	64 3927	10.2
20	+43.575	-55.139	65 3689	9.1	26	+64.175	-16.261	65 3710	7.8	9	-53.741	+19.353			30	-32.580	+40.608	64 3928	9.0
11	+43.863	-17.612			9	+64.545	-17.375			9	-53.687	+4.006			9	-32.240	+44.860		
9	+44.330	-30.836			11	+64.895	-37.811			27	-53.587	+27.424	64 3911	8.7	9	-32.011	+6.731		
	811					871					31								
16	+44.492	-28.194	65 3690	10.3	10	+64.923	-24.845			9	-53.177	+17.747			10	-31.181	+21.362		
12	+45.070	-20.762								9	-53.037	+47.701			9	-31.021	+56.866		
12	+45.220	-20.017								9	-52.850	+20.213			9	-30.172	+32.172		
10	+45.387	-11.126								9	-52.640	+57.686			9	-28.957	+43.410		
10	+45.746	-30.246								9	-52.247	+20.537			9	-28.808	+51.691		
9	+45.758	-54.836								13	-51.476	+22.586	64 3912	10.0	9	-27.918	+8.296		
9	+45.795	-26.559								9	-50.709	+9.840			9	-27.740	+2.260		
9	+45.831	-3.053								9	-50.454	+61.854			11	-27.706	+21.240	64 3929	10.2
9	+46.231	-63.284								9	-50.413	+4.562			9	-26.678	+48.998		
10	+46.261	-17.682								9	-50.320	+39.852			9	-26.202	+45.186		
	821										41								
13	+46.577	-7.775								11	-50.018	+55.713	64 3914	10.0	9	-25.766	+22.550		
11	+47.005	-35.779								14	-49.649	+43.370	64 3913	9.8	9	-25.675	+60.220		
11	+47.147	-4.988								9	-49.500	+8.087			9	-25.552	+33.031		
13	+47.447	-49.802	65 3692	10.2						9	-49.208	+7.695			9	-25.542	+27.388		
13	+47.470	-12.354	65 3691	10.3						9	-49.041	+19.092			10	-25.327	+44.959		
9	+48.031	-29.577								9	-48.584	+42.504			9	-25.106	+26.538		
15	+48.236	-44.368	65 3694	10.2						9	-48.102	+50.434			10	-25.054	+34.551	64 3931	10.3
15	+48.350	-46.152	65 3695	10.0						9	-47.917	+45.668			20	-24.927	+28.128	64 3930	9.1
9	+48.647	-51.461					</												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
9	-24°054	+13°077			9	-1°337	+30°047			56	+20°976	+11°442	64 3938	7·8	9	+44°491	+34°395		
9	-23°932	+57°787			12	-0°967	+61°790			9	+21°301	+53°855			56	+44°598	+21°033	64 3943	7·0
9	-23°404	+50°601			9	-0°710	+28°037			12	+21°545	+43°037			9	+45°118	+1°337		
9	-23°040	+42°300			9	-0°520	+44°280			9	+21°826	+12°036			10	+45°432	+54°028		
9	-22°881	+42°303			18	-0°014	+62°599	63 4432	9·0	9	+22°761	+37°684			9	+45°548	+24°327		
16	-22°696	+64°480	63 4427	9·9	9	+0°511	+62°863			24	+22°981	+0°650	65 3747	9·3	10	+45°610	+46°708		
9	-22°237	+41°732			10	+0°673	+49°155			9	+23°059	+9°671			9	+45°911	+53°214		
9	-22°214	+47°316			9	+1°363	+36°763			9	+24°590	+33°492			15	+46°166	+29°376		
13	-22°169	+23°878	64 3932	10·2	17	+2°108	+6°945	64 3934	9·4	28	+25°211	+15°945	64 3939	9·0	10	+47°070	+57°666		
10	-21°936	+47°499			9	+2°635	+15°525			9	+25°396	+23°963			9	+47°326	+61°875		
	121					181					241					301			
17	-21°052	+18°014	64 3933	9·7	9	+3°197	+10°236			9	+26°101	+21°289			10	+47°407	+43°896		
9	-21°516	+58°879			9	+3°881	+37°818			9	+26°524	+39°704			19	+47°457	+20°070	64 3945	9·0
9	-20°786	+53°223			9	+4°014	+59°115			15	+27°188	+10°974			30	+47°745	+56°388	64 3944	8·8
9	-20°115	+51°145			9	+4°233	+39°449			9	+27°196	+60°314			10	+48°280	+26°689		
9	-19°494	+24°176			9	+4°463	+10°550			9	+27°410	+36°171			10	+48°392	+7°959		
10	-19°172	+24°890			13	+4°713	+20°095			15	+28°088	+56°340			20	+48°911	+9°573	64 3946	8·8
9	-18°808	+25°186			10	+4°762	+2°910			9	+28°213	+46°255			9	+49°153	+18°125		
9	-18°357	+29°703			10	+4°888	+54°002			9	+28°959	+17°811			15	+49°230	+13°870		
9	-18°183	+35°478			9	+5°516	+9°939			15	+29°009	+22°573			9	+49°253	+14°012		
12	-17°165	+26°080			9	+5°884	+54°507			10	+29°128	+35°332			10	+49°402	+29°653		
	131					191					251					311			
15	-16°237	+58°590			9	+6°035	+63°643			10	+29°138	+58°811			9	+49°917	+16°170		
10	-15°842	+50°955			9	+6°544	+53°916			9	+29°144	+39°880			11	+50°103	+2°929		
10	-15°632	+15°430			9	+6°894	+43°135			15	+31°882	+59°010			12	+50°409	+63°223		
9	-15°199	+64°022			9	+7°535	+29°719			9	+32°424	+28°325			9	+50°577	+18°432		
9	-15°091	+32°868			18	+7°852	+27°985			12	+33°067	+11°685			12	+51°744	+60°831		
9	-14°939	+58°215			9	+8°089	+36°110			12	+33°106	+22°032			9	+52°126	+40°444		
10	-13°540	+18°032			9	+9°135	+38°992			9	+34°248	+33°145			11	+52°218	+17°095		
14	-12°768	+42°850			10	+9°420	+30°275			9	+34°288	+56°824			9	+52°284	+21°681		
9	-12°440	+61°314			9	+9°701	+22°437			15	+34°360	+59°476			9	+52°509	+11°677		
9	-12°320	+26°538			12	+11°225	+25°763			10	+34°475	+7°345			32	+52°693	+26°013	64 3947	8·4
	141					201					261					321			
10	-12°214	+61°324			9	+11°314	+6°750			9	+34°665	+11°527			10	+52°712	+53°288		
9	-11°978	+19°632			14	+11°584	+26°824			9	+34°683	+38°388			15	+53°215	+58°807		
9	-11°970	+26°606			9	+11°594	+33°460			9	+34°815	+47°754			9	+53°352	+24°671		
9	-11°931	+0°055			9	+12°654	+57°744			32	+34°936	+35°634	64 3940	8·5	9	+53°605	+63°942		
9	-11°654	+42°458			9	+13°186	+5°100			19	+35°070	+63°937			9	+53°843	+9°036		
9	-11°486	+30°362			9	+13°357	+56°090			9	+35°142	+38°540			9	+54°685	+0°355		
9	-11°423	+44°117			9	+13°580	+8°027			32	+35°240	+24°635	64 3941	8·8	9	+54°694	+50°194		
12	-10°752	+03°710			14	+14°085	+53°623			16	+35°277	+56°216			9	+54°876	+2°506		
9	-9°811	+61°698			10	+14°171	+31°840			9	+35°398	+3°064			9	+55°187	+43°716		
11	-9°363	+0°382			23	+14°441	+7°849	64 3935	8·8	9	+35°947	+23°667			88	+55°370	+1°209	64 3948	4·7
	151					211					271					331			
9	-8°925	+52°408			9	+14°682	+27°243			9	+36°102	+39°209			10	+55°588	+60°994		
9	-8°456	+33°393			9	+14°963	+63°231			67	+36°268	+15°835	64 3942	6·8	9	+55°772	+24°869		
11	-8°438	+19°681			9	+14°977	+63°309			9	+36°672	+20°212			19	+55°837	+10°012	64 3949	9·4
9	-8°233	+41°038			34	+15°133	+3°277	64 3936	8·5	9	+36°827	+37°633			9	+56°153	+12°927		
10	-8°183	+59°395			9	+15°644	+5°591			9	+36°865	+29°357			17	+56°491	+1°685	64 3950	8·8
9	-8°005	+63°012			14	+16°002	+43°029			9	+37°894	+41°782			9	+56°995	+64°612		
9	-7°625	+43°144			9	+16°182	+39°159			10	+37°965	+33°947			9	+57°152	+33°832		
14	-6°506	+22°737			9	+16°596	+19°922			9	+38°496	+18°925			9	+57°378	+1°031		
9	-6°231	+41°094			9	+17°088	+24°613			13	+39°176	+3°630			9	+57°737	+3°415		
9	-5°612	+33°953			15	+18°042	+40°167			9	+40°152	+14°238			9	+58°045	+10°287		
	161					221					281					341			
9	-4°456	+53°839			10	+18°304	+42°235			11	+40°450	+13°656			9	+58°064	+24°031		
9	-3°029	+26°329			27	+18°488	+36°267	64 3937	8·9	10	+41°785	+22°061			32	+58°854	+4°920	64 3951	8·3
11	-3°024	+57°138			16	+19°045	+56°848			9	+42°168	+39°193			10	+59°078	+60°425		
9	-3°351	+38°854			10	+19°167	+8°929			9	+42°931	+45°342			9	+59°100	+49°023		
10	-3°249	+11°926			9	+19°334	+38°722			10	+43°203	+57°274			11	+59°192	+10°185		
9	-2°858	+42°217			9	+19°524	+53°284			10	+43°391	+60°325			9	+59°882	+6°730		
9	-2°412	+27°567			9	+19°771	+10°180			9	+43°647	+55°056			9	+60°024	+27°731		
11	-1°842	+51°524			9	+19°995	+7°255			14	+43°936	+11°286			10	+60°881	+39°551		
9	-1°757	+2°263			10	+20°075	+5°478			10	+44°288	+59°607			9	+61°897	+12°931		
10	-1°390	+56°565			9	+20°715	+50°266			9	+44°373	+57°974			9	+63°287	+34°949		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
14	351, +63.437	+ 6.228	64	3952	9.6	9	411, -47.409	-49.208	65	3713	9.5	11	471, -28.841	-57.703	11	531, - 9.808	-19.957	65	3740	8.9	
18	+63.643	+33.747				10	-47.102	-26.650				9	-28.748	-53.836		10	- 9.580				-55.893
10	+63.809	+48.851				9	-47.024	-29.278				9	-28.639	-40.910		13	- 9.228				-48.467
10	+63.878	+34.226				9	-46.525	-21.177				12	-28.351	-12.671		11	- 8.874				-62.754
9	+63.958	+16.811				20	-46.335	-33.615				13	-28.242	-47.359		9	- 8.708				-41.090
10	+64.223	+28.153	9	-46.332	-20.089	9	-27.872	-29.674	9	- 8.100	-28.085	9	- 8.100	-28.085	9	- 8.100	-28.085				
9	+64.458	+12.139	13	-46.103	-33.945	18	-27.317	-52.312	13	- 7.209	-41.946	13	- 7.209	-41.946	13	- 7.209	-41.946				
9	+64.692	+28.091	11	-45.984	- 0.014	11	-27.299	- 5.655	11	- 7.117	- 4.568	11	- 7.117	- 4.568	11	- 7.117	- 4.568				
9	+64.815	+28.499	9	-45.613	-28.794	13	-27.158	-30.232	9	- 5.575	-42.000	9	- 5.575	-42.000	9	- 5.575	-42.000				
11	-64.707	- 0.208	10	-45.534	-25.248	11	-26.226	- 7.380	11	- 5.024	-56.710	11	- 5.024	-56.710	11	- 5.024	-56.710				
9	361 -64.567	-18.115	65	3692	10.2	10	421 -45.527	-30.143	65	3715	10.0	9	481 -25.984	-48.252	20	541 - 4.918	-36.845	65	3740	8.9	
12	-64.491	-50.354				9	-45.208	-22.398				9	-25.811	-51.425		9	- 4.841				- 3.611
14	-64.100	-44.870				11	-44.992	-46.830				41	-25.677	-20.129		9	- 4.715				- 4.199
14	-63.864	-46.646				15	-44.987	-50.479				17	-25.441	-51.237		11	- 4.202				-63.643
17	-63.836	-23.409				9	-44.953	-20.085				17	-23.559	-47.444		14	- 3.641				-25.724
15	-63.651	- 2.780	65	3700	10.0	11	-44.741	-51.439	12	-23.552	-54.005	9	- 2.920	-39.257	9	- 2.920	-39.257				
10	-63.290	-21.209	12	-44.397	- 0.543	12	-44.397	- 0.543	12	-23.197	-46.594	20	- 2.683	-35.401	65	3741	9.0				
9	-63.175	-51.937	12	-44.298	-58.472	12	-44.298	-58.472	11	-22.458	-55.015	9	- 2.623	-32.377	9	- 2.623	-32.377				
12	-63.106	- 7.047	65	3701	10.3	9	-44.159	- 6.704	14	-22.308	-17.444	9	- 2.610	-37.469	9	- 2.610	-37.469				
9	-63.004	-29.645	10	-43.973	- 9.415	10	-43.973	- 9.415	14	-22.032	-32.765	10	- 2.504	- 1.273	10	- 2.504	- 1.273				
10	371 -62.878	- 7.141	65	3699	9.6	9	431 -43.887	-22.403	65	3718	9.5	10	491 -21.938	-43.484	9	551 - 1.969	-16.211	65	3742	9.3	
11	-62.788	-27.707				9	-43.355	-12.347				11	-21.922	-16.898		12	- 1.678				-34.491
10	-62.648	-24.856				15	-43.046	-15.176				9	-21.619	-56.761		9	- 1.514				- 5.814
13	-62.114	-51.858				9	-42.788	-60.520				13	-21.310	-29.376		15	- 1.071				-56.915
11	-61.974	-60.459				9	-42.419	-51.252				10	-20.467	- 0.666		13	- 0.783				-47.796
11	-61.782	-11.474	12	-42.322	-48.311	12	-42.322	-48.311	9	-20.448	-27.132	11	- 0.634	-40.494	11	- 0.634	-40.494				
9	-61.303	-14.722	9	-42.281	-48.173	9	-42.281	-48.173	12	-19.917	-49.098	11	- 0.567	-22.554	11	- 0.567	-22.554				
14	-60.318	-50.408	65	3702	9.9	12	-42.142	-11.109	9	-18.667	-64.796	11	- 0.172	-48.346	11	- 0.172	-48.346				
9	-60.092	-16.873	18	-42.088	-43.675	18	-42.088	-43.675	9	-18.446	-42.104	19	+ 0.108	-51.135	65	3742	9.3				
12	-59.949	-25.466	10	-42.040	-46.727	10	-42.040	-46.727	15	-17.933	-12.733	12	+ 0.317	-27.358	12	+ 0.317	-27.358				
9	381 -59.916	- 9.151	65	3703	9.1	12	441 -42.003	-34.005	65	3720	9.9	10	501 -17.930	- 3.332	16	561 + 0.513	- 9.147	65	3743	8.8	
12	-59.535	-40.194				9	-41.968	-46.209				11	-17.346	-35.189		12	+ 1.032				-11.214
9	-59.056	-23.644				16	-41.463	-45.693				11	-17.339	-60.480		11	+ 2.035				-51.197
10	-59.054	- 8.301				11	-41.147	-54.419				9	-17.087	-43.564		12	+ 2.429				-61.266
20	-58.932	-58.781				9	-40.946	-47.616				16	-17.042	-58.410		9	+ 3.093				-29.059
9	-58.110	- 6.356	9	-40.915	- 1.669	9	-40.915	- 1.669	9	-16.858	-54.630	9	+ 3.633	- 5.755	9	+ 3.633	- 5.755				
13	-58.005	-42.500	65	3704	10.2	10	-40.844	-34.133	9	-16.546	-39.346	15	+ 4.179	- 6.845	15	+ 4.179	- 6.845				
10	-57.187	-25.379	11	-40.449	-36.014	11	-40.449	-36.014	12	-16.340	-55.988	12	+ 4.537	-42.141	12	+ 4.537	-42.141				
13	-56.043	-14.260	65	3705	10.2	10	-40.242	-42.077	9	-16.264	- 4.865	11	+ 4.738	-35.539	11	+ 4.738	-35.539				
11	-54.977	- 9.135	12	-39.838	-35.766	12	-39.838	-35.766	9	-15.977	- 5.494	14	+ 5.185	-44.906	14	+ 5.185	-44.906				
10	391 -54.972	- 5.074	65	3706	9.9	11	451 -39.771	-44.619	65	3722	10.3	10	511 -15.195	-43.888	13	571 + 5.211	-45.879	65	3743	8.8	
15	-54.793	-27.309				11	-39.536	-55.180				28	-14.628	-62.170		9	+ 5.251				-10.688
9	-54.443	-43.649				9	-38.999	-60.989				11	-14.543	- 0.782		12	+ 5.923				- 2.324
9	-54.101	- 2.221				9	-38.307	-15.625				10	-14.472	-44.040		9	+ 7.080				-20.789
16	-53.543	-38.160				12	-37.767	-29.085				10	-14.418	-31.785		13	+ 7.086				-10.948
12	-53.035	-40.850	65	3708	10.3	15	-35.920	-48.131	12	-14.157	-37.711	21	+ 7.210	- 7.385	65	3743	8.8				
16	-52.857	-12.448	65	3709	9.4	9	-35.856	-34.535	9	-13.915	-50.671	9	+ 7.269	-42.184	9	+ 7.269	-42.184				
9	-51.770	-26.790	9	-34.542	-50.472	9	-34.542	-50.472	12	-13.828	-50.845	11	+ 7.399	-27.243	11	+ 7.399	-27.243				
9	-50.681	-56.157	9	-34.251	-41.155	9	-34.251	-41.155	10	-13.806	-60.366	15	+ 8.180	-26.128	15	+ 8.180	-26.128				
12	-50.629	-20.953	18	-34.095	-64.367	18	-34.095	-64.367	26	-12.878	-19.065	10	+ 8.663	-33.987	10	+ 8.663	-33.987				
10	401 -50.458	-13.905	65	3710	7.8	14	461 -33.542	-30.637	65	3725	9.5	9	521 -12.815	-55.304	24	581 + 8.678	-20.848	65	3744	9.1	
32	-50.176	-15.682				11	-33.254	-20.269				10	-12.181	-49.706		10	+ 8.964				-43.046
9	-49.754	-16.762				9	-32.034	-13.956				12	-11.827	-38.601		13	+ 9.762				-21.493
10	-49.459	-33.117				9	-31.961	-16.365				9	-11.809	-14.699		16	+10.725				-60.109
10	-48.833	-24.204				16	-31.624	-12.846				10	-11.701	-60.044		14	+10.967				-42.349
9	-48.726	-13.046	16	-30.769	-28.247	16	-30.769	-28.247	11	-11.057	-18.551	14	+11.297	-21.065	14	+11.297	-21.065				
27	-48.622	-20.915	65	3711	8.7	9	-30.412	-36.513	12	-10.965	-59.126	9	+11.954	-17.903	9	+11.954	-17.903				
14	-48.166	- 6.757	65	3712	9.8	15	-29.761	-56.775	10	-10.889	-30.598	18	+12.523	-30.245	18	+12.523	-30.245				
12	-47.942	-37.130	9	-29.552	-35.677	9	-29.552	-35.677	12	-10.064	-36.051	9	+12.855	-49.270	9	+12.855	-49.270				
9	-47.524	-63.613	9	-29.111	-58.153	9	-29.111	-58.153	9	- 9.905	- 1.143	12	+12.917	-41.242	12	+12.917	-41.242				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591,					651,					711,				PLATE CENTRE.				
14	+13.325	-28.108			13	+33.783	-7.139			11	+52.472	-41.256			18h 45m, - 65°.				
10	+13.722	-38.357			10	+33.973	-31.730			15	+52.550	-31.548			Plate 1048. 1891, Aug. 31.				
19	+13.724	-28.879	65 3745	9.3	11	+34.400	-18.279			13	+53.537	-28.334			PROVISIONAL CONSTANTS.				
15	+15.136	-55.395			11	+35.033	-14.612			10	+54.191	-23.103			a = - .01130	d = - .00030			
11	+15.540	-32.169			9	+35.089	-52.850			13	+54.222	-51.445			b = + .00025	e = - .01143			
9	+15.992	-9.001			13	+35.466	-47.134			13	+54.753	-58.935			c = + .0401	f = - .2246			
12	+16.095	-41.055			12	+35.507	-13.668			12	+55.965	-13.448			To obtain standard co-ordinates, ξ, η				
9	+16.175	-16.290			12	+35.745	-59.575			9	+56.473	-52.113			$\xi = x + ax + by + c$				
9	+16.283	-16.784			11	+36.367	-54.064			9	+57.091	-6.724			$\eta = y + dx + ey + f$				
10	+16.655	-17.065			9	+36.497	-20.808			10	+57.449	-31.402							
	601					661					721								
9	+16.657	-60.725			9	+37.074	-38.598			9	+58.177	-55.863			20	-64.641	+25.769	64 3947	8.4
12	+16.657	-27.736			15	+37.390	-62.467			10	+58.473	-34.678			9	-60.332	+10.015	64 3949	9.4
30	+16.899	-59.149	65 3746	8.1	10	+37.422	-46.300			10	+58.538	-3.283			52	-60.193	+1.206	64 3948	4.7
9	+17.393	-59.747			9	+37.792	-62.050			12	+59.659	-10.383			12	-59.095	+1.762	64 3950	8.8
12	+17.872	-58.725			14	+37.870	-42.517			10	+60.690	-38.680			20	-56.976	+5.149	64 3951	8.3
14	+18.008	-30.365			9	+37.960	-63.364			9	+60.861	-38.467			12	-54.236	+34.253	64 3952	9.6
9	+18.683	-52.859			10	+39.703	-32.016			10	+61.261	-27.428			18	-53.712	+51.486	64 3953	8.5
9	+18.877	-19.906			12	+42.112	-59.560			12	+62.475	-49.926			9	-52.498	+6.793		
12	+19.076	-15.112			10	+42.153	-35.142			11	+62.577	-23.292			14	-50.376	+7.117	64 3954	9.1
9	+19.198	-0.421			11	+42.170	-40.333			9	+62.646	-20.998			12	-48.600	+41.700	64 3955	8.8
	611					671					731				11				
9	+19.671	-21.713			9	+42.215	-0.439			18	+62.917	-56.332			14	-47.708	+36.739	64 3956	9.3
12	+19.982	-31.2.5			10	+42.289	-19.218			10	+63.117	-38.214			10	-46.514	+53.922	64 3957	9.3
10	+20.042	-30.690			9	+42.453	-19.804			28	+63.123	-22.510	65 3752	8.3	9	-44.834	+39.603		
10	+20.140	-8.151			10	+42.578	-7.985			9	+64.189	-41.665			9	-43.762	+32.558		
9	+20.713	-11.736			15	+42.677	-57.486			10	+64.272	-44.201			9	-42.673	+37.169		
10	+21.779	-56.081			9	+42.731	-55.164			13	+64.725	-19.742			9	-39.611	+47.990		
9	+22.133	-37.845			18	+42.745	-28.813	65 3748	9.6					19	-38.997	+27.078	64 3958	8.5	
9	+22.178	-64.703			12	+42.750	-14.353							9	-38.776	+39.047			
13	+22.204	-7.631			12	+42.931	-24.364							9	-38.744	+28.296			
10	+22.334	-19.716			17	+42.993	-58.194	65 3749	9.6					12	-36.990	+2.920	64 3959	9.3	
	621					681									21				
9	+23.142	-6.397			9	+43.012	-44.224							9	-35.985	+19.238			
12	+23.460	-54.860			10	+43.113	-25.369							9	-34.960	+53.635			
11	+23.985	-23.743			9	+43.629	-33.026							16	-33.736	+6.048	64 3960	8.6	
9	+24.177	-6.401			11	+43.641	-32.494							16	-28.566	+58.344	64 3961	8.8	
16	+24.270	-48.807			9	+43.696	-8.625							9	-27.634	+42.312			
10	+24.551	-54.736			15	+43.725	-41.744							9	-26.608	+4.813			
9	+24.867	-23.959			9	+43.956	-41.096							9	-23.811	+5.440			
14	+25.071	-24.460			10	+44.367	-22.899							9	-18.797	+49.232			
11	+25.773	-24.659			9	+45.556	-58.842							20	-18.541	+64.000	63 4453	7.8	
12	+25.959	-37.695			14	+45.607	-8.181							13	-16.903	+18.296	64 3962	8.8	
	631					691									31				
11	+26.605	-2.494			9	+45.651	-60.533							9	-16.479	+34.110			
16	+27.493	-20.818			11	+45.991	-6.384							9	-16.404	+5.708			
12	+28.462	-30.937			10	+46.644	-31.372							9	-14.843	+59.900			
9	+28.899	-60.474			9	+46.720	-48.915							10	-14.465	+55.968			
11	+29.041	-2.870			9	+46.798	-32.446							10	-11.857	+59.974	64 3963	9.6	
9	+29.128	-30.130			10	+47.318	-50.756							9	-11.102	+60.492			
9	+30.034	-26.800			9	+47.370	-41.069							12	-6.838	+63.915	63 4457	9.1	
9	+30.039	-50.513			9	+47.456	-22.946							9	-5.313	+37.952			
13	+30.742	-41.628			10	+47.553	-8.023							9	-0.260	+45.060			
9	+30.783	-27.995			12	+48.096	-32.160							9	+0.477	+40.487			
	641					701									41				
9	+30.940	-54.670			9	+48.797	-57.560							11	+2.482	+57.729	64 3964	9.6	
13	+31.026	-37.461			12	+49.333	-50.271							19	+2.944	+33.909	64 3965	8.5	
10	+31.334	-61.898			16	+49.649	-34.854	65 3750	9.6					9	+3.949	+45.457			
9	+31.582	-26.311			9	+49.765	-5.635							9	+4.784	+45.497			
9	+31.596	-42.254			9	+51.322	-12.939							9	+8.977	+48.227			
9	+32.087	-2.627			9	+51.409	-37.301							9	+9.825	+18.740			
10	+32.279	-52.925			12	+51.441	-34.524							9	+10.127	+19.324			
9	+32.517	-43.467			10	+51.621	-64.864							9	+13.059	+44.025			
13	+32.748	-22.173			9	+52.191	-29.518							9	+13.741	+30.480			
14	+32.828	-58.745			22	+52.262	-13.182	65 3751	9.0					10	+16.876	+54.913			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	51,					111,				PLATE CENTRE. 19^h 3^m, - 65°. Plate 366. 1892, July 27. PROVISIONAL CONSTANTS. $a = -.01132$ $d = -.00040$ $b = +.00007$ $e = -.01117$ $c = -.00612$ $f = -.0714$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$											
17	+16.882	+43.909	64 3966	9.0	9	-25.838	-35.708			13	+2.530	+53.424			13	+2.530	+53.424				
9	+18.481	+22.326			9	-25.410	-43.178			14	+2.692	+40.985			14	+2.692	+40.985				
9	+20.341	+19.218			11	-25.070	-0.583	65 3757	9.1	12	+4.152	+52.703			12	+4.152	+52.703				
9	+21.102	+60.864			12	-24.554	-14.722	65 3758	9.1	30	+4.944	+58.245	64 3979	7.9	30	+4.944	+58.245	64 3979	7.9		
9	+23.395	+21.735			12	-22.122	-54.956	65 3759	9.6	12	+6.666	+25.022			12	+6.666	+25.022				
22	+25.624	+52.908	64 3967	8.0	9	-16.060	-40.645			14	+6.854	+56.051	64 3980	9.5	14	+6.854	+56.051	64 3980	9.5		
9	+26.218	+29.520			10	-15.665	-50.705			9	+7.848	+62.020			9	+7.848	+62.020				
9	+28.570	+58.592			9	-14.340	-51.223			9	+9.636	+32.062			9	+9.636	+32.062				
19	+29.217	+14.569	64 3968	8.7	9	-14.063	-18.803			10	+11.822	+60.440			10	+11.822	+60.440				
9	+29.522	+28.685			10	-9.776	-41.558			12	+12.492	+35.458			12	+12.492	+35.458				
	61					121					61					61					
9	+29.713	+23.013			14	-8.676	-0.627	65 3760	8.6	9	+14.181	+48.119			9	+14.181	+48.119				
9	+33.770	+61.675			9	-7.129	-60.593			19	+15.099	+18.221	64 3981	8.7	9	+15.099	+18.221	64 3981	8.7		
10	+36.291	+8.143			9	-7.000	-61.069			18	+10.160	+50.246	64 3982	8.7	18	+10.160	+50.246	64 3982	8.7		
9	+37.001	+49.330			9	-5.201	-55.659			10	+19.825	+59.831			11	+19.825	+59.831				
9	+37.303	+14.562			9	-3.873	-53.502			11	+20.792	+25.469	64 3983	9.2	15	+20.792	+25.469	64 3983	9.2		
9	+38.530	+47.860			11	-3.122	-36.961			34	+22.132	+0.381	65 3781	8.5	34	+22.132	+0.381	65 3781	8.5		
9	+38.865	+14.752			9	-0.071	-47.232			10	+23.035	+21.011			10	+23.035	+21.011				
9	+40.538	+64.042	63 4464	9.6	9	+0.964	-36.397			17	+24.868	+41.182	64 3984	8.8	17	+24.868	+41.182	64 3984	8.8		
9	+43.997	+0.579			11	+1.048	-36.965			9	+25.243	+26.131			9	+25.243	+26.131				
9	+44.001	+62.984			9	+2.173	-50.641			11	+25.530	+15.976			11	+25.530	+15.976				
	71					131					71					71					
9	+44.077	+10.141			9	+10.323	-48.277			16	+48.287	+4.413	64 3972	9.3	16	+48.287	+4.413	64 3972	9.3		
12	+45.224	+32.470	64 3969	9.3	19	+11.105	-36.248	65 3761	8.1	9	+47.667	+1.183			9	+47.667	+1.183				
9	+45.933	+48.429			9	+18.662	-3.435			13	+47.127	+29.784			10	+27.304	+50.662				
9	+46.161	+32.184	64 3970	9.6	20	+20.285	-62.668	66 3402	8.5	9	+46.893	+16.644			9	+28.233	+1.193				
9	+50.132	+31.129	64 3971	9.6	9	+21.986	-9.692			11	+44.531	+24.899			12	+29.327	+15.483				
9	+56.130	+17.329			10	+24.765	-12.627			10	+44.280	+43.059			12	+30.151	+28.531				
9	+56.371	+6.841			9	+25.422	-37.617			15	+42.768	+2.175	64 3973	9.6	9	+34.279	+40.304				
9	+61.619	+21.627			9	+25.639	-12.274			13	+38.073	+62.765	63 4475	9.6	12	+34.876	+5.549				
9	+62.248	+46.584			9	+33.442	-0.485			18	+36.696	+35.253	64 3974	9.3	11	+35.519	+37.982				
9	+62.847	+50.874			12	+35.512	-37.245			9	+35.670	+52.828			14	+36.093	+18.300				
	81					141					21					81					
40	+63.898	+64.173	63 4469	6.9	11	+37.889	-35.968			11	+35.098	+44.438			11	+37.871	+31.740				
11	-63.335	-35.168	65 3750	9.6	12	+40.678	-11.106			9	+34.845	+55.328			9	+39.205	+21.120				
14	-62.258	-13.375	65 3751	9.0	9	+41.084	-45.940			9	+34.714	+53.235			9	+40.305	+13.636				
9	-60.669	-31.668			11	+43.182	-19.547			10	+34.073	+31.879			9	+40.850	+43.150				
9	-59.908	-28.389			12	+46.465	-30.494			17	+30.113	+0.972	65 3767	9.3	10	+41.190	+30.514				
9	-57.582	-51.392			26	+47.003	-2.214	65 3762	7.7	9	+25.538	+3.678			11	+43.706	+41.722				
9	-56.537	-58.815			9	+47.782	-21.962			13	+24.401	+0.900			9	+44.932	+27.106				
9	-50.885	-29.345			9	+49.695	-41.209			10	+21.107	+43.621			11	+47.398	+21.355				
19	-50.750	-21.899	65 3752	8.3	9	+49.912	-58.518			15	+21.031	+41.531	64 3975	9.5	9	+48.163	+44.057				
9	-49.373	-19.017			24	+50.800	-4.008	65 3763	7.7	9	+20.856	+13.757			9	+48.700	+38.205				
	91					151					31					91					
10	-48.576	-55.642			9	+50.928	-43.073			11	+19.233	+1.371			10	+52.473	+48.800				
10	-45.517	-47.134			11	+52.149	-6.041			11	+18.483	+33.782			9	+53.557	+64.435				
12	-45.446	-24.523			11	+52.178	-17.088			13	+16.613	+3.180			9	+50.727	+37.447				
9	-44.463	-62.187			9	+53.094	-29.961			11	+11.967	+4.246			10	+57.028	+3.647				
10	-44.433	-56.808			9	+54.582	-63.160	66 3408	9.3	9	+9.804	+41.050			16	+57.390	+56.955	64 3985	8.7		
11	-40.574	-38.967			9	+55.613	-61.725	66 3409	9.6	32	+9.560	+33.414	64 3976	8.3	9	+57.668	+49.924				
9	-40.256	-16.941			9	+55.892	-1.430			9	+9.110	+43.418			11	+57.684	+55.528	64 3986	9.5		
12	-39.847	-13.156	65 3753	9.0	9	+63.351	-12.886			14	+8.307	+2.390	65 3776	9.5	9	+57.712	+29.345				
48	-39.521	-11.255	65 3754	5.9						12	+8.130	+19.616			15	+60.997	+31.352	64 3987	9.1		
9	-38.402	-38.356								24	+6.465	+12.341	64 3977	8.5	13	+63.871	+15.041	64 3988	9.5		
	101										41					101					
9	-37.555	-9.618								14	+5.477	+16.855	64 3978	9.5	42	+64.205	+4.052	65 3703	7.7		
9	-37.287	-19.748								9	+4.528	+50.723			11	+62.774	+0.609				
9	-30.264	-54.540								10	+3.105	+16.227			10	+62.723	-41.824				
9	-30.181	-53.045								10	+1.799	+23.226			11	+61.961	-17.620				
9	-29.224	-48.000								9	+1.446	+50.493			9	+61.347	-43.603				
11	-29.042	-48.665								9	+0.750	+14.073			10	+61.253	-59.103				
9	-28.611	-33.982								9	+1.235	+1.248			11	+60.109	-30.382				
12	-28.553	-34.795	65 3755	9.6						10	+1.382	+8.722			9	+59.388	-1.727				
12	-28.422	-4.863	65 3756	9.3						12	+2.375	+25.301			13	+50.292	-63.383	66 3408	9.3		
9	-26.548	-53.208								10	+2.401	+60.094			12	+55.395	-61.881	66 3409	9.6		

19h 3m, - 65°				19h 3m, - 65°				19h 3m, - 65°				19h 3m, - 65°				19h 3m, - 65°				19h 3m, - 65°				
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,				PLATE CENTRE. 19h 21m, - 65°. Plate 402. 1892, Aug. 18. PROVISIONAL CONSTANTS. a = - .01160 d = - .00041 b = + .00029 e = - .01146 c = - .0383 f = - .1296 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$														
II	-5.135	-12.617			I3	+7.263	-32.979			9	+7.438	+17.038			9	+7.438	+17.038							
IO	-50.007	-9.802			9	+9.704	-41.692			9	+8.506	+63.264			I3	+11.053	+49.229							
II	-49.707	-24.386			II	+11.429	-58.883			9	+12.381	+19.000			9	+12.381	+19.000							
I3	-49.198	-5.837			II	+16.045	-32.675			9	+14.116	+56.277			9	+14.116	+56.277							
9	-46.502	-9.505			II	+16.098	-22.597			IO	+15.269	+17.806			9	+15.641	+42.681							
II	-43.354	-19.596			IO	+17.934	-28.795			9	+16.402	+33.105			9	+16.402	+33.105							
II	-42.208	-3.092			II	+18.289	-48.514			I6	+17.781	+32.198			9	+19.193	+34.321							
9	-41.928	-5.294			II	+20.643	-16.535			9	+21.655	+40.436			9	+23.394	+39.060							
I2	-41.624	-17.458			II	+22.816	-40.159			I3	+23.451	+35.910			I3	+24.592	+45.924							
IO	-40.766	-2.363			9	+23.010	-37.516			9	+28.100	+37.850			9	+28.100	+37.850							
	121					181																		
15	-40.446	-28.061	65 3764	9.6	15	+23.064	-38.972	65 3782	8.9	9	-63.642	+49.808			9	+21.655	+40.436							
9	-40.357	-9.196			IO	+25.087	-50.291			I7	-62.168	+56.795	64 3985	8.7	9	+23.394	+39.060							
15	-38.094	-35.148			60	+27.103	-24.399	65 3783	7.0	9	-61.782	+55.413	64 3986	9.5	I3	+23.451	+35.910							
9	-37.642	-31.349			II	+29.811	-60.509			9	-61.420	+37.298			I3	+24.592	+45.924							
IO	-37.246	-51.263			II	+32.138	-30.008			9	-58.736	+3.616			9	+28.100	+37.850							
9	-34.837	-21.433			II	+35.399	-40.233			I6	-56.753	+31.540	64 3987	9.1	I3	+28.501	+48.431							
II	-34.594	-18.320			15	+35.453	-50.352	65 3784	9.2	I2	-52.768	+16.061	64 3988	9.5	II	+31.461	+47.241							
II	-33.707	-51.339			IO	+35.772	-54.045			9	-50.993	+11.524			9	+31.792	+23.202							
9	-33.697	-20.624			II	+36.102	-21.019			9	-50.276	+24.566			II	+36.314	+7.761							
IO	-31.161	-51.940			I2	+36.486	-7.348			9	-50.047	+15.779			9	+37.024	+12.092							
	131					191																		
I7	-30.893	-4.829	65 3765	8.7	I4	+36.644	-5.984	65 3785	9.5	9	-48.413	+1.662			IO	+37.511	+25.376							
9	-29.945	-61.866			I2	+37.779	-52.172			IO	-43.190	+8.915			9	+37.999	+49.254							
15	-29.837	-22.695	65 3766	9.3	9	+38.297	-35.126			9	-42.210	+51.091			9	+38.172	+40.794							
II	-28.789	-50.672			I3	+41.524	-48.634	65 3786	9.5	9	-41.657	+4.628			IO	+39.049	+23.976							
IO	-28.564	-7.501			I2	+41.845	-44.483			9	-41.342	+41.910			I5	+40.365	+18.631	64 3996	9.5					
15	-28.118	-8.726	65 3768	9.4	IO	+43.432	-62.749			9	-40.888	+44.439			9	+40.732	+38.244							
21	-27.612	-19.010	65 3769	8.7	9	+43.640	-37.121			II	-37.010	+54.004	64 3989	9.4	9	+40.825	+33.379							
IO	-27.393	-31.445			I2	+43.784	-18.932			9	-34.541	+32.803			9	+40.098	+0.648							
14	-27.361	-37.454			9	+44.161	-48.653			9	-34.478	+26.735			I2	+47.901	+25.110							
9	-25.163	-46.001			II	+45.051	-10.087			IO	-33.922	+39.303			IO	+48.992	+59.666							
	141					201																		
II	-24.761	-24.343			II	+45.836	-14.399			9	-33.415	+4.672			9	+49.692	+7.356							
IO	-24.714	-34.900			IO	+47.872	-15.983			9	-33.246	+24.537			I9	+51.487	+38.584	64 3997	8.7					
44	-24.256	-41.716	65 3770	7.7	15	+49.671	-48.386	65 3787	9.5	9	-33.109	+63.639			I9	+52.051	+51.773	64 3998	8.5					
IO	-23.488	-63.480			IO	+53.682	-19.420			9	-31.981	+10.672			9	+53.159	+51.522							
I3	-22.012	-38.956			9	+55.447	-15.013			IO	-31.267	+8.107			32	+59.386	+13.768	64 3999	7.9					
14	-21.570	-38.803			15	+57.041	-15.328	65 3788	8.9	IO	-27.635	+42.814			9	+61.795	+7.506							
I2	-21.447	-2.487			I2	+60.016	-24.239			IO	-26.338	+48.588	64 3990	9.5	I4	+62.614	+63.888	63 4536	9.1					
15	-19.169	-38.842	65 3772	9.5	I2	+63.745	-4.850			IO	-25.312	+48.655			I2	-62.373	-48.838	65 3787	9.5					
15	-17.888	-61.935	66 3412	9.3						I3	-23.727	+27.854	64 3991	9.5	9	-60.602	-6.528							
IO	-15.223	-5.008								9	-23.473	+13.022			9	-60.421	-19.637							
	151																							
II	-14.732	-15.887								9	-19.715	+27.703			9	-58.982	-15.129							
I8	-13.512	-19.517	65 3773	8.9						IO	-17.794	+34.354			I7	-57.372	-15.331	65 3788	8.9					
39	-12.047	-8.930	65 3774	7.9						IO	-16.373	+23.789			I3	-53.745	-24.002							
I3	-10.853	-49.178								9	-12.468	+12.742			9	-52.130	-28.248							
0	-10.522	-3.509								I3	-9.801	+58.827	64 3992	9.5	II	-51.437	-4.388							
50	-9.161	-62.886	66 3413	7.2						IO	-8.724	+24.691			9	-51.151	-0.939							
9	-7.977	-21.212								II	-6.585	+21.180			20	-48.447	-23.551	65 3789	8.8					
15	-7.813	-51.945	65 3775	9.5						9	-6.246	+23.835			II	-46.207	-35.728							
15	-7.412	-54.822	65 3777	9.5						IO	-5.206	+48.486			48	-45.931	-47.026	65 3790	7.1					
9	-6.912	-8.146								9	-3.278	+46.515			I9	-43.148	-37.026	65 3791	8.8					
	161																							
9	-3.130	-21.879								9	+0.329	+3.863			I7	-41.928	-51.090	65 3792	8.9					
30	+1.172	-19.016	65 3778	8.4						9	+0.366	+13.976			I3	-41.114	-35.167							
9	+2.013	-33.332								IO	+2.085	+1.312			I2	-40.302	-5.169							
I2	+2.440	-23.953	65 3779	9.5						9	+2.234	+30.727			I4	-39.450	-27.273							
9	+2.786	-12.148								II	+3.964	+56.607	64 3993	9.2	I4	-39.096	-7.886	65 3793	9.5					
I2	+3.125	-18.095								9	+4.214	+41.815			9	-38.697	-64.503							
22	+3.888	-25.827	65 3780	8.7						I5	+4.241	+16.772	64 3994	9.5	I3	-38.584	-36.049							
9	+6.330	-47.426								9	+5.399	+51.586			I4	-37.904	-46.264							
I2	+7.074	-8.080								9	+5.721	+5.616			9	-36.998	-23.428							
II	+7.087	-54.808								9	+6.065	+52.853			0									

19^h 39^m, - 65°

[illegible]

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,				PLATE CENTRE.				
															20 ^h 15 ^m , - 65°.				
															Plate 1092. 1894, Sept. 29.				
															PROVISIONAL CONSTANTS.				
															a = - .01151 d = + .00101				
															b = - .00094 e = - .01134				
															c = + .0686 f = + .0250				
															To obtain standard co-ordinates, ξ, η				
															$\xi = x + ax + by + c$				
															$\eta = y + dx + ey + f$				
12	+49°343	+44°636			12	-26°465	-19°401			9	+30°690	-36°165			10	-63°238	+25°881		
9	+49°591	+40°140			9	-24°494	-49°562			9	+31°047	-55°617			9	-63°004	+22°057		
9	+50°705	+47°031			15	-24°432	-20°553			11	+32°671	-35°828			14	-61°805	+15°535	64 4035	6.8
10	+50°709	+13°393			13	-23°577	-30°237			9	+32°682	-35°312			15	-61°790	+15°823		
9	+50°997	+11°227			9	-22°955	-49°666			12	+33°734	-43°410			42	-61°566	+15°367		
16	+51°116	+31°012			9	-22°930	-49°778			10	+33°981	- 8°439			17	-59°994	+29°801	64 4036	8.7
19	+51°117	+23°380	64 4033	9.8	10	-20°656	-46°070			9	+34°256	-39°873			10	-59°037	+38°429		
9	+51°694	+19°902			9	-20°115	-60°445			9	+36°534	-44°870			9	-55°313	+11°647		
26	+52°800	+50°123	64 4034	9.0	9	-19°741	-26°302			11	+37°338	-18°991			18	-54°980	+25°953	64 4037	8.6
12	+53°135	+64°169			36	-19°023	-34°370	65 3837	7.9	11	+37°376	- 0°337			9	-49°398	+48°035		
	121					181					241				11				
12	+53°627	+ 0°241			11	-18°428	-39°667			9	+38°501	-18°364			9	-48°867	+27°802		
9	+53°859	+26°769			16	-17°418	-55°537			13	+38°729	-37°047			9	-46°450	+49°717		
16	+54°110	+22°341			12	-17°324	- 5°228			16	+40°616	-45°388			9	-46°044	+45°522		
17	+54°152	+26°175			9	-17°015	-61°077			15	+40°907	-19°015			9	-44°608	+39°751		
18	+54°855	+15°737			12	-16°924	-49°629			9	+42°154	-52°708			9	-41°755	+20°183		
19	+54°902	+16°013			10	-15°802	-59°760			12	+42°589	-21°203			14	-40°923	+52°934	64 4038	9.8
56	+55°061	+15°550	64 4035	6.8	11	-15°155	-48°012			9	+44°651	- 4°849			9	-39°068	+41°433		
29	+57°852	+29°855	64 4036	8.7	9	-14°677	-51°814			16	+46°398	-20°787			9	-38°674	+37°837		
17	+59°223	+38°394			9	-14°385	-44°077			11	+47°201	-29°906			9	-38°502	+60°975		
9	+60°060	+52°502			14	-13°827	-57°939			9	+47°565	-51°076			9	-38°392	+60°136		
	131					191					251				21				
10	+61°053	+11°411			11	-12°051	-20°656			14	+47°777	-45°708			9	-48°867	+27°802		
9	+61°274	+29°329			9	-11°564	-46°636			21	+48°072	-35°083	65 3843	9.5	9	-46°450	+49°717		
28	+62°382	+25°636	64 4037	8.6	18	-11°236	-50°428	65 3838	9.9	12	+48°457	- 6°965			9	-46°044	+45°522		
9	+64°103	+ 2°343			42	- 9°440	-38°466	65 3839	8.6	20	+48°909	- 2°167	65 3844	9.6	9	-44°608	+39°751		
10	+64°172	+25°209			16	- 7°878	-47°084			10	+49°584	-27°585			9	-41°755	+20°183		
11	-64°977	-51°912			19	- 6°648	-29°950			28	+50°306	-19°139	65 3845	8.6	14	-40°923	+52°934	64 4038	9.8
9	-62°948	-18°918			11	- 6°165	-59°273			12	+50°316	-28°238			9	-39°068	+41°433		
9	-62°859	- 2°970			11	- 6°018	-15°328			14	+51°067	-24°080			9	-38°674	+37°837		
21	-62°671	- 2°070			9	- 4°384	-22°165			9	+53°568	- 9°185			9	-38°502	+60°975		
28	-62°507	-39°338	65 3832	9.2	12	- 2°962	-41°886			13	+57°028	-16°845			9	-38°392	+60°136		
	141					201					261				21				
32	-60°826	-49°360	65 3833	8.9	11	- 0°518	-38°225			34	+58°759	- 8°349	65 3846	7.9	11	-36°725	+ 5°887		
12	-60°175	-18°988			15	- 0°001	- 8°414			9	+59°390	- 0°589			9	-36°274	+55°627		
13	-59°216	-40°431			9	+ 1°255	-42°742			10	+60°213	-10°520			13	-35°789	+20°463	64 4039	9.9
12	-57°227	-10°164			9	+ 1°424	-39°860			12	+60°627	-12°875			9	-32°253	+54°859		
9	-54°440	-33°877			36	+ 1°639	- 7°371	65 3840	8.6	9	+61°277	-64°609			9	-30°942	+19°797		
9	-53°924	-31°019			31	+ 4°797	-31°271	65 3841	8.9	9	+62°615	-53°213			9	-28°772	+53°631		
36	-51°615	-29°908	65 3834	8.2	12	+ 6°251	-53°911							13	-28°652	+47°911			
11	-51°458	-25°692			12	+ 6°437	-38°549							9	-28°398	+20°156			
12	-50°806	-63°794			9	+ 7°875	-27°848							9	-28°324	+26°738			
9	-50°579	-61°075			13	+ 8°017	-54°453							9	-27°297	+34°456			
	151					211									31				
12	-47°529	- 2°543			9	+ 8°129	-30°179							9	-27°121	+21°970			
9	-46°918	-11°356			9	+ 8°509	-60°415							9	-26°532	+43°941			
10	-45°098	-52°867			10	+ 9°236	-24°479							12	-25°231	+30°255			
9	-42°737	-47°797			9	+ 9°757	- 1°695							10	-23°874	+36°349			
9	-42°502	-36°960			15	+11°105	-28°678							9	-22°087	+26°716			
19	-41°872	-17°342	65 3835	9.6	9	+12°785	-21°245							9	-19°936	+38°241			
13	-41°871	-27°753			12	+12°949	-47°561							9	-19°450	+54°003			
16	-40°243	-27°000			12	+16°599	-36°074							9	-18°684	+16°486			
10	-39°602	- 4°300			10	+18°560	-61°313							9	-18°435	+14°523			
13	-38°574	-59°871			16	+18°869	-47°769							9	-17°902	+22°259			
	161					221									41				
9	-37°578	- 2°202			11	+19°299	-54°859							9	-17°272	+ 6°473			
15	-35°786	-33°311			9	+21°420	-45°572							9	-16°551	+ 5°866			
12	-34°143	-18°851			9	+23°892	-49°388							9	-14°295	+22°225			
48	-33°988	- 4°696	65 3836	6.8	12	+24°188	-48°947							9	- 9°777	+55°060			
12	-33°622	-47°087			11	+24°234	-46°950							26	- 8°126	+30°165	64 4040	8.2	
9	-33°598	- 4°067			11	+25°275	-17°885							9	- 6°855	+ 4°504			
10	-30°152	-35°511			9	+25°569	-45°430							9	- 6°702	+36°949			
9	-29°384	-44°627			9	+26°567	-57°062							9	- 4°510	+46°132			
15	-28°334	-64°081			22	+27°784	-21°883	65 3842	9.8					15	- 4°117	+22°247	64 4041	9.0	
9	-26°905	-13°427			9	+30°519	-44°238							9	- 3°916	+54°199			

20 15m, - 65					20 15m, - 65					20 15m, - 65					20 15m, - 65					20 15m, - 65					20 15m, - 65				
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.					
	51,					111,					171,																		
9	- 3.029	+17.605			20	+59.038	+36.726	64 4056	8.0	14	-12.884	-46.162	65 3848	9.8															
9	- 2.404	+55.753			9	+59.620	+46.031			14	- 8.462	-34.753																	
9	- 2.284	+45.604			9	+60.069	+13.673			9	- 6.921	-50.875																	
9	- 2.017	+32.553			9	+60.607	+27.588			11	- 6.682	- 4.080																	
15	+ 0.682	+ 5.538	64 4042	9.0	9	+61.909	+24.199			9	- 6.650	-49.539																	
14	+ 2.025	+20.793	64 4043	9.9	9	+63.750	+ 8.233			14	- 4.142	-46.828																	
9	+ 2.333	+61.291			11	-64.542	-46.276			11	- 3.484	- 9.073																	
26	+ 2.523	+47.958	64 4044	7.7	9	-64.004	-28.057			9	- 3.140	- 8.018																	
9	+ 6.044	+54.550			18	-63.884	-19.578	65 3845	8.6	10	- 2.582	-57.668																	
9	+ 7.799	+23.053			10	-63.220	-28.660			9	- 1.579	-28.858																	
	61					121					181																		
10	+ 8.078	+ 2.226			11	-62.769	-24.454			9	- 1.271	-26.332	65 3849	9.5															
9	+ 9.420	+56.057			12	-61.933	- 0.017			14	- 0.059	-54.577	66 3487	9.9															
10	+10.844	+26.095			10	-57.338	-16.828	65 3846	7.9	14	+ 0.163	-56.027																	
9	+11.317	+52.967			20	-56.214	- 8.225			12	+ 2.276	-47.263																	
9	+12.553	+49.528			9	-54.607	-10.296			9	+ 2.281	- 8.524																	
9	+12.913	+ 5.259			9	-54.029	-12.612			12	+ 2.893	-60.830																	
9	+13.174	+23.585			9	-49.213	-52.707			12	+ 2.895	-44.054																	
9	+16.808	+54.198			9	-46.044	-40.559			9	+ 3.341	-24.494																	
9	+17.089	+52.372			10	-44.559	- 1.564			10	+ 3.662	-21.853																	
10	+17.415	+ 8.226			13	-43.891	-49.833			12	+ 4.206	- 1.366																	
	71					131					191																		
9	+18.038	+43.886			12	-42.613	- 0.893			10	+ 6.005	- 6.537	65 3850	9.3															
9	+19.384	+48.010			9	-42.047	- 1.199			16	+ 7.341	-52.519																	
11	+20.736	+60.664			9	-41.916	- 4.762			9	+11.596	-53.199																	
9	+21.290	+31.580			12	-41.338	-14.838			9	+12.585	-16.394																	
9	+22.750	+18.891			11	-40.743	-41.643			9	+13.208	-18.056																	
11	+26.167	+43.410			9	-39.320	-56.136			11	+13.324	-37.541																	
9	+26.463	+59.439			9	-39.271	-40.467			9	+15.207	-62.740																	
9	+26.702	+31.496			11	-37.790	-11.062			9	+18.224	-43.763																	
9	+29.739	+16.140			11	-36.192	-15.109			16	+21.865	-40.155	65 3851	9.5															
9	+31.913	+49.038			9	-33.951	- 4.096			9	+22.804	-52.757																	
	81					141					201																		
9	+32.154	+28.307			12	-32.827	-42.134			9	+23.420	-25.028																	
9	+32.960	+56.108			12	-32.362	-39.893	66 3479	9.9	9	+27.765	-11.228	65 3852	9.0															
11	+33.620	+22.889	64 4045	9.6	13	-32.269	-60.851			18	+30.617	-54.867																	
9	+33.660	+31.924			10	-31.848	-52.961			9	+31.319	-25.332																	
11	+34.298	+27.399			9	-31.349	-36.097			9	+34.251	-32.253																	
14	+34.921	+16.357	64 4046	9.6	10	-31.215	-49.773			9	+34.383	-13.264																	
9	+36.458	+58.700			9	-30.493	-62.311			9	+34.932	-43.652																	
9	+37.368	+56.850			10	-30.057	-32.580	65 3847	9.2	11	+36.994	-32.950																	
9	+37.765	+ 9.991			16	-29.782	-19.527			9	+37.536	-31.146																	
9	+38.570	+18.697			9	-29.582	-21.856			9	+37.902	-30.192																	
	91					151					211																		
9	+38.625	+14.162			10	-26.331	-35.599			11	+37.954	-63.093																	
9	+38.625	+26.095			9	-24.887	- 3.631			12	+38.128	-36.455																	
15	+39.445	+32.190	64 4047	9.0	9	-22.378	-31.051			12	+39.041	-51.572																	
9	+39.642	+52.872			11	-22.160	-27.202			11	+41.479	-17.274																	
18	+41.733	+25.411	64 4048	8.6	9	-20.076	-54.135			9	+42.033	-42.079																	
36	+43.701	+28.389	64 4049	7.6	10	-19.917	- 5.650			12	+44.773	-30.732																	
9	+44.401	+32.646			10	-19.015	-28.721			12	+45.212	-10.144																	
9	+44.701	+34.623			11	-18.734	-23.414			9	+45.652	- 0.731																	
10	+45.419	+62.458			11	-18.597	-61.816			9	+48.668	-55.928																	
9	+45.774	+44.676			9	-18.384	- 8.872			11	+51.644	-25.310																	
	101					161					221																		
14	+45.788	+17.573	64 4050	9.6	9	-17.469	-53.422			10	+52.165	-18.389																	
16	+47.542	+ 7.476	64 4051	9.3	10	-16.990	- 9.266			10	+58.076	-18.450																	
12	+49.198	+55.593	64 4052	9.3	9	-16.967	-27.059			9	+58.520	-35.099																	
9	+53.362	+44.228			9	-16.930	- 0.407			9	+59.753	-29.196																	
10	+54.354	+60.191	64 4053	9.6	9	-16.130	-44.062			10	+60.162	-58.497																	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
16	-26°773	+15°559	64 4059	9.6	10	+29°241	+52°597			10	-24°850	-9°889			11	+48°703	-9°350		
11	-26°082	+28°450			9	+30°107	+45°451			9	-22°382	-14°061			22	+49°828	-56°938	66 3504	8.8
15	-25°869	+60°458			9	+30°748	+12°013			10	-19°391	-12°129			14	+51°098	-63°978	66 3505	9.6
9	-25°596	+28°899			19	+31°916	+5°704	64 4071	9.4	9	-17°983	-32°843			9	+52°263	-17°562		
9	-24°711	+43°635			9	+32°219	+47°294			9	-17°203	-47°590			9	+52°267	-15°234		
9	-24°593	+12°690			9	+32°550	+12°921			10	-16°615	-43°648			9	+56°651	-16°645		
9	-23°615	+23°093			9	+33°519	+0°965			15	-12°388	-23°439	65 3859	9.6	15	+63°738	-9°988	65 3867	9.6
9	-22°015	+34°120			17	+34°088	+13°413	64 4072	9.2	11	-11°181	-21°263			11	+63°795	-36°781		
9	-19°674	+13°789			15	+37°419	+38°689			19	-10°117	-25°585	65 3860	8.9					
10	-18°571	+17°259			9	+37°776	+5°688			12	-9°724	-28°163							
	61					121					181								
9	-18°088	+6°492			9	+39°269	+13°072			11	-9°444	-50°883							
16	-17°797	+54°090	64 4060	9.3	9	+39°812	+42°936			14	-9°080	-24°342							
16	-16°971	+19°577			11	+40°821	+20°172			10	-8°595	-61°700							
9	-16°697	+34°326			9	+41°456	+57°650			11	-8°420	-30°224							
9	-16°407	+61°164			9	+42°738	+37°691			12	-8°413	-44°170							
9	-15°927	+45°687			12	+45°599	+37°905			12	-6°461	-54°126							
11	-13°409	+3°202	65 3857	9.3	16	+45°689	+36°854	64 4073	9.4	9	-5°862	-45°196							
30	-13°406	+2°702	65 3858	8.6	9	+46°567	+64°513			9	-5°420	-3°862							
11	-12°837	+9°438			9	+46°604	+25°507			14	-5°172	-4°116							
17	-12°727	+9°514	64 4061	9.4	32	+48°116	+45°373	64 4074	8.5	9	-1°774	-18°178							
	71					131					191								
17	-11°030	+22°917	64 4062	9.3	9	+49°894	+29°072			22	-1°693	-16°587	65 3861	8.9					
33	-6°513	+28°351	64 4063	8.4	9	+50°429	+46°746			9	+0°748	-44°635							
9	-4°101	+53°589			15	+53°179	+60°272	64 4075	9.6	9	+1°529	-0°762							
18	-4°082	+37°292	64 4064	8.8	18	+53°205	+54°182	64 4076	9.2	18	+2°424	-5°889	65 3862	9.0					
9	-2°772	+5°508			9	+53°793	+37°623			19	+2°672	-47°486	65 3863	9.2					
19	-1°370	+30°355	64 4065	8.8	10	+53°935	+54°461	64 4077	9.6	9	+2°782	-26°011							
10	-1°270	+12°419			9	+53°984	+39°863			10	+3°651	-2°019							
9	-0°875	+0°316			16	+54°094	+40°289	64 4078	9.3	14	+4°236	-44°328							
9	-0°624	+24°556			11	+55°173	+28°785			10	+5°302	-8°783							
9	-0°162	+10°709			9	+57°821	+7°057			10	+6°215	-5°114							
	81					141					201								
9	+0°713	+33°922			10	+58°198	+10°822			10	+8°281	-15°238							
15	+3°922	+50°966			9	+58°876	+52°332			12	+10°462	-50°301							
10	+4°998	+5°064			9	+60°707	+24°957			16	+11°018	-64°343	66 3499	9.0					
11	+7°338	+43°956			9	+61°443	+42°585			10	+14°841	-29°255							
9	+7°533	+47°699			16	+61°993	+45°002	64 4079	9.0	13	+16°593	-29°167							
9	+10°551	+22°945			11	+62°941	+55°893			12	+17°781	-40°808							
9	+10°821	+54°425			9	+62°984	+3°641			18	+19°039	-22°503	65 3864	9.4					
9	+11°393	+26°771			15	+63°765	+1°183			9	+19°757	-38°411							
9	+11°829	+61°108			9	+64°233	+17°335			10	+21°276	-9°462							
16	+13°597	+54°195	64 4066	9.4	11	-61°945	-25°567			11	+22°206	-12°009							
	91					151					211								
9	+13°888	+38°890			10	-61°926	-18°622			12	+22°297	-26°113							
19	+15°386	+35°135	64 4067	8.9	10	-56°018	-18°265			12	+22°581	-13°163							
9	+16°173	+30°453			9	-54°376	-34°818			9	+22°787	-64°064							
9	+16°446	+33°477			9	-53°649	-11°625			9	+23°841	-10°943							
17	+17°408	+27°499	64 4068	9.0	10	-53°596	-28°850			11	+25°140	-38°138							
9	+17°961	+9°488			10	-53°534	-13°309			9	+27°772	-16°421							
9	+19°242	+25°773			10	-51°542	-34°184			13	+30°470	-7°432							
14	+19°789	+29°095			10	-51°053	-58°028			12	+31°348	-52°525							
11	+19°789	+42°123			9	-48°725	-16°257			34	+31°631	-16°560	65 3865	8.0					
9	+20°122	+28°490			10	-46°250	-8°337			15	+34°846	-41°674							
	101					161					221								
9	+22°441	+55°311			9	-45°765	-7°738			14	+35°033	-8°388							
9	+23°493	+57°293			15	-44°263	-19°292			14	+35°187	-49°938							
11	+24°008	+27°289			19	-41°446	-40°321	65 3853	9.2	10	+36°760	-21°630							
44	+24°556	+12°852	64 4069	7.6	10	-40°964	-56°545			12	+37°229	-21°692							
11	+24°859	+40°421			11	-35°507	-18°995			12	+39°539	-42°393							
9	+25°821	+34°627			12	-33°032	-23°712			12	+39°681	-63°585							
15	+27°173	+1°173			14	-30°229	-30°879			10	+39°756	-2°764							
9	+27°462	+39°654			50	-29°928	-23°127	65 3855	6.8	19	+41°697	-1°738	65 3866	9.2					
17	+27°580	+41°484	64 4070	9.0	10	-26°187	-26°967			10	+42°768	-10°127							
9	+28°431	+22°444			9	-26°175	-9°093			16	+48°328	-22°837							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE.																			
20h 51m, - 65°.																			
Plate 416. 1892, Aug. 19.																			
PROVISIONAL CONSTANTS.																			
a = - .01132 d = - .00079																			
b = + .00055 e = - .01127																			
c = - .0123 f = - .0334																			
To obtain standard co-ordinates, $\xi \eta$																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
15	-64.179	+39.767	64 4078	9.3	13	+1.450	+6.484			11	-42.688	-42.770	65 3871	8.8	9	+32.019	-22.991		
12	-62.298	+28.370			9	+2.004	+46.642			26	-40.280	-47.336			9	+33.503	-48.662		
9	-58.128	+6.874			9	+3.118	+36.252			11	-37.376	-37.205			9	+34.685	-46.203		
11	-58.009	+10.662			9	+6.467	+20.121			12	-36.089	-37.025			9	+35.436	-2.025		
10	-57.017	+42.565			13	+9.355	+46.986			11	-35.650	-6.605			14	+35.618	-42.251		
20	-56.655	+45.029	64 4079	9.0	10	+10.791	+52.159			24	-33.957	-35.191	65 3872	9.0	9	+39.203	-7.049		
11	-56.525	+24.932			12	+13.681	+4.288			11	-33.861	-57.323			12	+41.060	-39.076		
14	-56.473	+55.958			10	+14.764	+36.458			12	-31.003	-28.463			14	+41.974	-55.061	65 3880	9.6
22	-52.861	+35.365	64 4080	9.0	16	+14.964	+35.102	64 4087	9.6	16	-26.902	-38.538			14	+42.818	-7.584		
10	-52.740	+3.835			13	+19.084	+35.999			9	-25.546	-59.611			12	+45.722	-21.065		
11	-52.606	+40.401			24	-20.300	+39.142	64 4088	8.9	26	-24.563	-33.797	65 3873	8.5	12	+46.415	-32.404		
10	-52.471	+17.577			10	+21.258	+25.959			34	-23.250	-49.484	65 3874	8.3	10	+48.787	-17.624		
14	-51.770	+1.446			10	+21.418	+19.218			11	-20.154	-53.655			12	+48.877	-48.786		
9	-49.391	+27.777			9	+21.768	+25.247			11	-18.533	-6.719			10	+50.765	-14.071		
11	-45.221	+8.028			10	+23.703	+0.635			36	-14.226	-19.409	65 3875	8.4	10	+53.959	-3.735		
11	-45.189	+21.151			10	+24.168	+24.574			20	-13.952	-9.532	65 3876	9.4	10	+55.593	-46.480		
36	-44.686	+4.934	65 3870	8.3	13	+25.479	+6.803			10	-13.486	-2.496			15	+5.406	-23.796	65 3881	9.4
18	-42.967	+52.530	64 4081	9.3	9	+26.248	+19.473			11	-12.089	-3.788			9	+58.820	-5.871		
22	-42.863	+60.737	64 4082	8.9	9	+26.276	+11.011			13	-11.351	-41.264			12	+59.746	-2.923	65 3882	10.4
11	-42.741	+49.173			9	+26.404	+17.159			11	-10.804	-26.011			9	+62.059	-1.616		
41	-39.944	+25.462	64 4083	7.6	11	+27.189	+41.870			10	-9.666	-12.930			20	+64.357	-31.122	65 3884	9.2
10	-38.781	+49.354			14	+27.239	+20.210			16	-7.760	-2.762	65 3877	9.6					
9	-36.712	+6.865			10	+28.099	+28.641			10	-5.913	-54.171							
10	-34.875	+8.592			9	+28.387	+9.012			9	-4.561	-47.675							
9	-33.635	+62.650			11	+29.005	+49.160			10	-4.182	-64.033							
9	-33.533	+6.064			12	+29.234	+60.574			11	-3.854	-14.386							
10	-30.979	+31.050			22	+33.793	+38.720	64 4089	9.0	9	-1.300	-40.316							
24	-30.682	+25.410	64 4084	8.6	12	+34.324	+3.233			10	-1.170	-9.330							
11	-25.645	+64.884			28	+34.583	+33.555	64 4090	8.8	12	-0.906	-0.450							
11	-25.246	+47.602			11	+36.655	+26.759			10	+0.040	-27.613							
12	-24.411	+42.675			10	+36.682	+26.487			9	+0.302	-31.811							
9	-22.852	+29.838			9	+38.951	+16.847			15	+0.559	-17.957	65 3878	9.4					
10	-21.893	+25.753			10	+39.569	+58.187			12	+0.628	-57.538							
15	-17.467	+17.015	64 4085	9.6	18	+42.533	+29.652			9	+1.574	-5.780							
10	-15.890	+57.482			20	+42.785	+49.338	64 4092	9.2	12	+2.362	-24.630							
13	-14.250	+38.709			15	+43.750	+24.968			14	+4.211	-50.522							
14	-13.962	+49.076			11	+49.656	+23.176			11	+4.784	-21.749							
9	-12.013	+63.534			13	+50.227	+7.346			14	+6.071	-7.520							
9	-11.684	+47.140			12	+50.515	+8.724			10	+6.216	-42.914							
11	-9.689	+30.646			13	+50.893	+7.652			12	+7.179	-0.724							
10	-8.695	+47.386			15	+53.218	+55.192	64 4093	9.6	20	+8.642	-55.971	66 3513	9.3					
12	-8.128	+60.764			12	+56.564	+13.356			16	+9.942	-39.119							
12	-7.856	+19.541			13	+59.691	+41.715			9	+10.570	-7.098							
24	-6.513	+17.496	64 4086	8.6	12	+60.403	+1.768	65 3883	10.4	12	+10.833	-59.803							
11	-6.512	+38.424			52	+60.694	+39.657	64 4094	7.4	11	+13.611	-20.614							
11	-3.312	+48.036			12	+62.561	+5.846	64 4095	10.4	12	+14.760	-32.500							
14	-3.156	+45.703			9	+64.538	+22.579			19	+17.330	-30.273	65 3879	9.6					
9	-1.984	+44.830			22	-61.575	-57.530	66 3504	8.8	11	+18.195	-1.996							
11	-1.829	+47.452			15	-59.820	-64.487	66 3505	9.6	13	+20.770	-29.027							
13	+0.262	+61.508			10	-57.606	-16.856			11	+20.847	-40.293							
					101					14	+21.571	-29.202							
					9	-54.383	-25.002			12	+23.152	-55.199							
					15	-51.045	-9.716	65 3867	9.6	9	+23.202	-20.747							
					12	-49.071	-36.432			10	+25.465	-1.208							
					10	-47.362	-38.316			9	+26.079	-38.015							
					29	-47.226	-32.067	65 3868	8.8										
					30	-46.526	-9.240	65 3869	8.4	10	+26.729	-46.711							
					9	-46.139	-40.772			14	+26.751	-36.106							
					10	-43.541	-1.896			14	+29.604	-32.353							
					13	-43.424	-10.798			10	+30.082	-60.711							
					10	-42.688	-48.695			11	+30.753	-19.293							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 21 ^h 9 ^m , - 65°. Plate 422. 1892, Sept. 12. PROVISIONAL CONSTANTS. a = - .01127 d = - .00032 b = + .00025 e = - .01148 c = - .0920 f = - .1176 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51, 9 -14.736 +30.068 10 -14.348 +47.655 } 64 4109 10.4 9 -14.016 + 8.492 16 -12.192 +54.785 } 64 4110 8.0 21 -12.068 +54.695 9 -11.173 +41.534 14 - 8.305 +24.751 } 64 4111 10.0 9 - 6.588 +58.201 9 - 5.860 +19.945 22 - 5.102 +31.366 } 64 4112 8.4 61 9 - 4.434 +49.768 9 - 1.234 +20.911 9 - 0.870 +46.245 9 + 0.751 +64.618 11 + 1.619 +55.733 } 64 4113 10.2 9 + 3.052 +32.733 9 + 3.806 +13.032 9 + 6.046 +54.011 14 + 6.647 +49.545 } 64 4114 9.6 9 + 8.024 + 4.865 71 13 + 9.578 +29.461 } 64 4115 9.4 9 +10.373 +12.988 18 +10.589 +53.443 } 64 4116 9.2 9 +11.874 +43.968 9 +12.467 + 5.401 9 +14.275 + 3.738 9 +14.446 + 1.519 9 +15.515 + 1.852 14 +19.923 +21.581 } 64 4117 9.3 16 +22.373 +41.051 } 64 4118 9.4 81 9 +22.736 +55.338 9 +24.172 +25.704 15 +25.557 +12.553 } 64 4119 9.6 9 +26.141 + 2.793 9 +27.520 +52.155 14 +28.267 +32.841 } 64 4121 9.4 11 +28.331 +41.218 } 64 4120 10.2 20 +28.613 +30.789 } 64 4122 8.5 19 +29.677 +10.025 } 64 4124 9.0 13 +30.416 +61.455 } 64 4123 9.9 91 9 +31.179 + 9.304 15 +32.753 +53.363 } 64 4125 9.6 9 +32.809 +27.663 9 +33.128 +53.139 } 64 4126 10.4 10 +34.463 +26.809 } 64 4127 10.2 9 +36.323 +12.103 9 +36.776 +17.028 9 +41.374 +30.742 9 +41.984 +60.204 23 +43.479 + 9.729 } 64 4128 8.2 101 9 +44.002 +25.974 9 +47.125 + 5.100 9 +47.685 +51.792 16 +48.131 +14.709 } 64 4129 9.3 10 +48.749 +13.329 } 64 4130 9.6 9 +49.476 +25.925 11 +49.570 +34.005 } 64 4131 10.4 9 +54.174 +28.954 10 +56.500 +32.892 } 64 4133 10.2 20 +56.611 +41.687 } 64 4132 8.8					111, 9 +57.613 + 1.058 9 +58.490 +35.721 9 +59.146 +52.302 12 +60.593 +44.098 } 64 4134 9.8 9 -63.055 -49.251 9 -61.163 - 3.967 9 -56.518 -46.470 14 -56.312 -23.741 } 65 3881 9.4 12 -55.461 - 2.744 } 65 3882 10.4 10 -53.241 - 1.281 121 10 -51.108 -14.476 9 -50.913 -13.007 9 -50.750 -22.944 19 -48.856 -30.551 } 65 3884 9.2 9 -48.804 -22.601 9 -48.033 -19.548 15 -46.987 -12.219 } 65 3887 9.8 13 -46.656 - 2.227 } 65 3888 10.4 10 -46.218 -44.578 } 65 3886 10.2 9 -43.012 -38.952 131 9 -42.708 -60.040 9 -42.364 -61.366 11 -38.818 -21.114 } 65 3889 10.4 14 -37.875 -63.149 } 66 3522 9.3 10 -34.865 -29.293 9 -34.631 -48.555 10 -33.693 -35.941 9 -33.644 -12.037 9 -33.120 - 7.725 10 -33.031 -32.191 141 9 -32.780 -48.670 10 -30.928 -43.204 10 -30.752 - 7.613 11 -28.866 -19.956 } 65 3892 10.4 15 -26.605 -25.563 } 65 3893 9.6 9 -24.768 -11.747 9 -24.442 -44.034 9 -24.300 -45.254 9 -21.197 -58.967 9 -20.950 -16.141 151 9 -20.942 -55.461 11 -19.011 -23.365 } 65 3894 10.4 9 -18.413 -42.991 11 -18.020 -31.591 15 -15.629 - 0.695 10 -13.900 -58.611 9 -12.080 -13.453 10 - 6.648 -40.600 10 - 5.938 -54.983 10 - 4.308 -40.623 161 11 - 3.971 -38.646 11 - 3.598 -29.856 } 65 3898 10.4 10 - 3.074 -57.873 20 - 2.621 -60.285 } 66 3538 9.0 9 - 1.359 -46.172 11 - 0.214 -26.370 9 - 0.144 -22.662 9 + 0.538 - 8.441 9 + 1.993 -11.743 9 + 2.242 -41.983					171, 9 + 2.254 -24.407 9 + 2.278 -24.193 9 + 2.730 - 9.065 9 + 3.214 -48.908 12 + 3.340 -38.772 55 + 4.748 - 5.803 } 65 3900 5.8 20 + 6.432 - 4.059 } 65 3901 9.1 9 + 7.102 -10.082 19 + 7.713 -33.833 } 65 3902 9.0 11 + 8.068 -45.868 181 9 + 9.460 -47.590 9 + 9.494 -50.630 18 + 9.931 - 3.280 } 65 3903 9.2 9 +10.492 -46.484 10 +10.530 -45.645 9 +11.179 -32.260 11 +11.674 -17.153 } 65 3904 10.4 11 +12.694 -28.450 9 +12.762 -45.118 10 +12.904 -35.415 191 10 +14.105 -60.975 } 66 3548 10.4 9 +15.844 -29.593 9 +16.017 -13.115 9 +16.258 -24.677 9 +17.061 - 7.746 13 +17.787 -56.289 } 66 3549 10.0 11 +21.352 -58.722 } 66 3552 10.2 14 +22.323 - 0.468 } 65 3905 10.2 9 +23.573 -47.064 13 +24.211 -31.441 } 65 3906 10.4 201 10 +25.785 -41.164 15 +26.649 -37.262 } 65 3907 9.9 10 +27.067 - 9.246 11 +28.740 -32.719 10 +29.195 -20.750 12 +30.784 -27.171 } 65 3908 10.4 9 +31.181 -20.658 18 +32.033 -10.532 } 65 3909 9.3 19 +32.289 -13.642 } 65 3910 9.0 10 +33.885 -16.493 211 15 +35.140 -16.739 } 65 3911 9.6 9 +36.021 -41.703 18 +36.168 -15.667 } 65 3912 8.8 10 +36.473 -38.893 10 +36.564 -14.478 9 +38.073 -13.800 10 +38.703 -26.201 15 +39.072 -55.242 } 66 3557 9.3 9 +40.331 -11.335 } 65 3913 10.4 10 +40.344 -11.368 221 9 +41.315 -44.880 11 +43.871 -28.569 18 +44.265 -14.146 } 65 3914 9.2 14 +44.773 -64.389 } 66 3560 9.2 10 +45.672 -53.111 9 +50.927 -16.707 17 +50.927 -43.252 } 65 3916 9.2 14 +51.243 -21.336 } 65 3915 10.2 13 +51.630 -23.353 10 +56.645 - 7.672				

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,				PLATE CENTRE.				
22	-54'28I	-15'056	65 3919	9.2	23	- 8'669	- 8'330	65 3927	9.3	10	+39'228	-21'008	65 3939	10.4	21 ^h 45 ^m , - 65°.				
9	-52'999	-52'140			9	- 8'370	-22'047			15	+40'304	-17'427			Plate 4058. 1916, Aug. 24.				
11	-51'470	-33'665			11	- 8'255	-52'487			9	+41'399	-49'190			PROVISIONAL CONSTANTS.				
10	-50'343	- 8'346			12	- 7'653	-43'294			12	+42'499	-33'742			a = - .01175	d = + .00005			
9	-49'649	-15'523			9	- 6'612	-30'600			9	+42'782	- 1'911			b = + .00006	e = - .01161			
9	-49'299	-21'290			15	- 5'838	-64'586			20	+43'089	-12'624	65 3940	9.9	c = - .0867	f = - .0236			
14	-49'207	-26'100			9	- 5'830	-61'172			9	+44'093	-19'266			To obtain standard co-ordinates, ξ, η				
12	-49'019	-31'477			9	- 5'803	- 3'232			9	+44'798	- 7'249			$\xi = x + ax + by + c$				
12	-47'531	-50'356			10	- 4'252	-55'724			11	+45'060	-31'082			$\eta = y + dx + ey + f$				
12	-46'808	-56'877			10	- 4'125	-31'285			10	+45'948	-10'226							
	181					241					301								
17	-46'688	-43'244	65 3920	10.4	12	- 3'866	-22'641			19	+46'762	-47'584	65 3941	10.2	12	-63'751	+19'678	64 4160	10.4
9	-46'375	-58'614			13	- 3'862	-62'880			9	+47'195	-26'359			9	-62'425	+ 0'885		
11	-46'321	-32'036			9	- 2'440	-56'895			14	+47'428	-30'534	65 3942	10.4	12	-60'044	+ 8'503		
15	-42'340	-47'997	65 3921	10.4	9	- 1'750	-58'895			10	+47'490	-21'206			9	-56'823	+26'564		
9	-41'414	-41'581			13	- 1'684	-39'142			9	+52'020	-23'187			12	-56'708	+46'210		
12	-38'863	-41'605			11	- 0'594	-32'226			11	+53'818	-15'398			10	-54'880	+21'135		
9	-38'506	-56'332			23	+ 1'244	-14'530	65 3928	9.6	18	+53'921	-50'587	65 3943	10.4	13	-54'574	+37'981	64 4162	10.4
9	-37'702	-44'539			12	+ 2'290	-34'467			9	+55'086	- 4'233			17	-54'391	+ 6'517	64 4161	9.8
9	-37'539	-19'639			13	+ 2'830	-45'719			9	+55'367	- 9'568			10	-54'078	+46'768		
16	-37'041	-17'958	65 3922	10.2	11	+ 4'447	-49'360			20	+55'925	-56'113	66 3578	9.6	9	-53'774	+41'546		
	191					251					311				11				
9	-36'886	-17'053			20	+ 5'180	-14'058	65 3929	10.2	11	+57'083	-29'598			14	-50'423	+44'186	64 4163	10.4
11	-36'726	-32'305			10	+ 5'461	-45'303			18	+57'121	-25'068	65 3944	10.4	10	-46'958	+12'406		
9	-36'553	-55'456			20	+ 6'308	-21'023	65 3930	10.2	12	+57'427	-14'809			13	-44'650	+51'448	64 4165	10.4
11	-34'860	-35'732			10	+ 6'443	-26'590			12	+57'448	-21'498			14	-44'287	+33'371	64 4164	9.8
12	-34'669	-10'722			10	+ 6'552	-42'558			10	+59'398	- 3'825			11	-42'607	+59'227		
9	-31'846	-54'745			10	+ 7'895	-20'430			15	+60'531	-32'436			11	-41'449	+22'744		
9	-31'791	-61'959			11	+ 7'962	-16'892			20	+63'963	-14'991	65 3945	9.4	9	-38'907	+55'601		
22	-30'807	-12'386	65 3923	9.3	30	+ 8'736	-36'245	65 3931	9.2	9	+64'420	-19'803			9	-36'372	+18'273		
10	-30'433	-41'750			18	+ 9'269	-50'755	65 3932	10.4						12	-35'732	+35'735		
10	-30'321	-16'767			10	+10'018	- 4'184								17	-35'184	+47'968	64 4166	9.6
	201					261									21				
11	-30'311	-12'946			9	+10'056	-47'139								12	-33'765	+28'820		
9	-30'246	-34'884			9	+11'253	-24'371								9	-33'729	+56'159		
9	-30'232	-48'665			12	+11'447	- 8'611								12	-33'074	+37'805		
9	-29'939	-60'478			30	+14'141	-29'303	65 3933	9.0						9	-32'541	+29'264		
11	-28'949	-31'791			11	+14'305	-61'716								24	-32'220	+36'971	64 4167	8.4
16	-28'014	-22'633	65 3925	10.4	29	+14'612	-46'061	65 3934	9.0						11	-26'602	+24'143		
11	-27'740	-27'202			9	+15'694	-47'886								10	-25'199	+19'604		
9	-27'238	-63'046			11	+16'037	-16'342								15	-23'914	+63'222	64 4168	10.2
10	-27'081	-40'581			9	+16'586	- 1'251								11	-21'794	+ 3'940		
9	-26'069	-21'891			9	+16'599	- 1'096								13	-16'270	+52'671	64 4169	10.4
	211					271									31				
10	-25'700	-40'157			13	+17'550	-46'411								10	-16'232	+18'004		
9	-25'457	-55'454			19	+18'090	-10'858	65 3935	10.4						11	-15'739	+39'841		
11	-25'438	-63'750			11	+18'745	-48'722								26	-14'387	+18'662	64 4170	8.8
12	-24'837	-56'169			20	+19'037	-38'608	65 3936	9.9						9	-12'973	+43'414		
9	-24'473	-31'604			9	+19'296	-21'663								10	-12'706	+33'618		
9	-21'652	- 5'960			64	+19'477	-16'565	65 3937	5.9						10	-11'146	+33'471		
9	-21'054	-50'110			11	+21'750	-16'246								12	-10'113	+21'404	64 4171	10.2
13	-20'614	-19'961			13	+24'846	-54'112								18	- 9'589	+45'592	64 4174	9.3
9	-20'530	-42'553			10	+26'743	-16'328								14	- 9'524	+36'668	64 4172	9.8
12	-20'198	-42'943			12	+28'660	-47'792								16	- 9'408	+23'847	64 4173	9.6
	221					281									41				
30	-18'035	-45'042	65 3926	9.0	12	+30'666	-37'735								12	- 8'329	+55'979		
11	-16'865	-64'324			12	+31'737	-34'220								18	- 6'906	+19'871	64 4175	9.4
9	-15'555	-29'269			12	+31'927	-47'019								9	- 3'871	+38'858		
9	-12'992	-59'864			14	+32'054	-37'847								9	- 3'157	+32'131		
14	-12'353	-37'890			11	+32'279	-60'288								9	- 3'065	+30'651		
11	-12'015	-24'538			12	+33'032	-22'994								10	- 0'252	+ 7'877		
10	-11'744	-10'419			10	+33'253	-10'076								11	+ 0'485	+31'124		
12	-11'644	-33'859			13	+34'439	-46'175								11	+ 2'385	+35'139		
12	- 9'235	-53'210			21	+36'183	-19'098	65 3938	9.4						13	+ 2'575	+19'110	64 4178	9.6
11	- 8'849	-13'979			10	+36'657	-13'234								9	+ 2'592	+40'846		

159

9471.—11

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
	51,					111,					171,					PLATE CENTRE.				
9	+ 0° 942	+ 55° 651			13	- 50° 864	- 20° 484	65 4021	9.7	9	+ 31° 079	- 50° 839				22h 39m, - 65°.				
20	+ 1° 543	+ 12° 272	64 4263	8.7	24	- 48° 207	- 45° 232	65 4022	8.0	9	+ 37° 023	- 18° 703	65 4059	10.0		Plate 452. 1892, Oct. 10.				
9	+ 2° 060	+ 43° 734			9	- 47° 269	- 9° 673			9	+ 39° 118	- 5° 387	65 4060	10.0		PROVISIONAL CONSTANTS.				
16	+ 5° 228	+ 53° 723	64 4264	9.2	9	- 45° 890	- 10° 021			9	+ 39° 194	- 45° 219	65 4062	9.8		a = - .01140	d = - .00040			
11	+ 5° 476	+ 53° 337	64 4265	10.0	10	- 45° 521	- 11° 450	65 4023	10.2	10	+ 39° 772	- 29° 103	65 4063	9.8		b = + .00054	e = - .01137			
9	+ 7° 519	+ 48° 590			9	- 44° 677	- 6° 992	65 4024	10.2	15	+ 39° 785	- 6° 047	65 4061	9.4		c = - .1224	f = - .1299			
9	+ 9° 559	+ 35° 990			9	- 41° 214	- 52° 009			9	+ 40° 592	- 4° 066				To obtain standard co-ordinates, ξ, η				
9	+ 10° 632	+ 3° 957	65 4049	10.0	9	- 40° 938	- 35° 239			9	+ 41° 210	- 35° 603				$\xi = x + ax + by + c$				
9	+ 11° 129	+ 45° 827			9	- 39° 007	- 53° 721			14	+ 44° 159	- 34° 406	65 4064	9.4		$\eta = y + dx + ey + f$				
9	+ 11° 651	+ 60° 962			12	- 38° 877	- 64° 310	66 3655	9.7	9	+ 44° 909	- 34° 250								
	61					121					181									
9	+ 11° 679	+ 9° 644			9	- 35° 290	- 1° 136	65 4025	10.2	9	+ 45° 769	- 19° 770			10	- 62° 918	+ 44° 097			
9	+ 11° 815	+ 59° 816	64 4267	10.0	12	- 33° 910	- 41° 770	65 4026	10.1	9	+ 46° 536	- 15° 875			9	- 62° 138	+ 40° 737			
9	+ 13° 709	+ 47° 949			20	- 32° 018	- 39° 987	65 4027	9.0	9	+ 46° 633	- 12° 122	65 4065	9.8	9	- 61° 238	+ 45° 521			
9	+ 14° 208	+ 21° 509	64 4268	10.0	12	- 31° 675	- 40° 245	65 4028	9.8	9	+ 46° 672	- 43° 026	65 4066	10.0	11	- 60° 882	+ 40° 279	64 4279	9.8	
10	+ 16° 047	+ 38° 485	64 4269	9.6	11	- 31° 608	- 21° 504	65 4029	10.0	16	+ 46° 712	- 57° 512	66 3683	8.8	16	- 60° 220	+ 6° 741	65 4068	9.4	
					9	- 29° 654	- 9° 665			9	+ 51° 558	- 43° 525			11	- 59° 562	+ 35° 536	64 4280	10.0	
9	+ 19° 747	+ 15° 030			12	- 28° 800	- 62° 350	66 3658	9.7	15	+ 52° 945	- 45° 294	65 4067	9.2	24	- 58° 419	+ 4° 638	65 4070	8.5	
9	+ 20° 650	+ 19° 203			9	- 28° 122	- 43° 707	65 4030	10.2	9	+ 54° 845	- 32° 155	65 4069	10.0	9	- 58° 013	+ 49° 817			
20	+ 20° 810	+ 0° 590	65 4056	8.7	9	- 27° 376	- 42° 970			9	+ 58° 596	- 37° 564			22	- 56° 991	+ 39° 573	64 4281	8.7	
10	+ 22° 412	+ 46° 025	64 4270	9.5	32	- 26° 497	- 52° 298	65 4032	7.5	12	+ 59° 215	- 7° 454	65 4071	9.7	9	- 56° 011	+ 3° 976			
	71					131					191					11				
9	+ 28° 281	+ 4° 929			9	- 24° 613	- 38° 372	65 4033	10.2	13	+ 62° 588	- 6° 111	65 4073	9.4	12	- 55° 603	+ 64° 503	64 4282	9.2	
9	+ 32° 671	+ 15° 425			9	- 24° 475	- 38° 426			9	+ 64° 751	- 31° 039			9	- 53° 730	+ 46° 998			
18	+ 32° 951	+ 30° 520	64 4271	9.0	9	- 23° 803	- 58° 261							12	- 53° 586	+ 5° 533	65 4072	10.0		
9	+ 34° 476	+ 26° 047	64 4272	9.7	9	- 21° 735	- 56° 485							11	- 50° 955	+ 18° 431				
24	+ 37° 560	+ 61° 125	64 4273	8.2	9	- 21° 208	- 1° 022							17	- 47° 457	+ 54° 611	64 4283	9.0		
					12	- 20° 695	- 35° 167	65 4035	9.8					9	- 46° 169	+ 11° 176				
9	+ 38° 551	+ 30° 817			9	- 19° 878	- 16° 161	65 4036	10.0					14	- 42° 506	+ 44° 916	64 4284	9.6		
9	+ 40° 669	+ 33° 273			9	- 19° 068	- 3° 100	65 4037	10.1					9	- 41° 468	+ 2° 780				
9	+ 41° 943	+ 29° 428			16	- 18° 173	- 14° 075	65 4038	9.2					11	- 41° 332	+ 36° 312				
9	+ 45° 286	+ 5° 155			9	- 16° 297	- 61° 219							9	- 39° 344	+ 42° 594				
	81					141					21				21					
9	+ 46° 430	+ 59° 398			12	- 14° 654	- 44° 454	65 4039	9.7					12	- 34° 816	+ 35° 492				
9	+ 48° 675	+ 54° 656	64 4275	10.0	11	- 13° 082	- 24° 579	65 4041	9.6					18	- 33° 743	+ 4° 464	65 4075	9.4		
9	+ 49° 971	+ 42° 642			16	- 13° 039	- 44° 494	65 4040	9.2					10	- 32° 875	+ 23° 534				
14	+ 51° 550	+ 40° 018	64 4276	9.4	9	- 10° 015	- 40° 659							21	- 31° 760	+ 43° 593	64 4285	9.0		
9	+ 52° 074	+ 12° 314			9	- 8° 905	- 17° 157	65 4042	10.1					10	- 31° 199	+ 17° 281				
					9	- 8° 814	- 11° 626							10	- 30° 341	+ 57° 824				
9	+ 53° 270	+ 53° 526	64 4278	9.7	63	- 4° 945	- 28° 810	65 4044	5.0					11	- 30° 268	+ 49° 444				
9	+ 55° 611	+ 44° 296			20	- 2° 577	- 15° 227	65 4045	9.1					10	- 30° 056	+ 54° 132				
14	+ 55° 621	+ 6° 841	65 4068	9.4	9	+ 0° 892	- 35° 925							26	- 29° 885	+ 20° 027	64 4286	8.4		
9	+ 56° 141	+ 40° 893			9	+ 2° 932	- 24° 761							14	- 29° 620	+ 45° 298	64 4287	10.0		
	91					151									31					
24	+ 57° 254	+ 4° 612	65 4070	8.5	11	+ 3° 612	- 30° 541	65 4046	9.4					9	- 29° 332	+ 18° 447				
9	+ 57° 372	+ 40° 343	64 4279	9.8	9	+ 3° 655	- 30° 627							17	- 28° 742	+ 17° 915	64 4288	9.8		
9	+ 57° 390	+ 45° 601			9	+ 3° 955	- 62° 769							9	- 28° 568	+ 59° 573				
9	+ 58° 351	+ 35° 510	64 4280	10.0	24	+ 4° 186	- 5° 722	65 4047	8.6					10	- 25° 435	+ 22° 517				
19	+ 61° 197	+ 39° 343	64 4281	8.7	13	+ 7° 665	- 49° 249	65 4048	9.6					18	- 22° 774	+ 53° 086	64 4289	9.4		
9	+ 62° 155	+ 5° 153	65 4072	10.0	13	+ 10° 443	- 43° 027	65 4050	9.2					9	- 17° 705	+ 23° 219				
11	+ 64° 396	+ 64° 140	64 4282	9.2	14	+ 12° 001	- 21° 909	65 4051	9.4					11	- 15° 603	+ 56° 219				
9	- 64° 317	- 18° 477			20	+ 12° 006	- 54° 651	66 3674	9.0					9	- 15° 461	+ 1° 517				
9	- 63° 727	- 47° 152			9	+ 12° 613	- 9° 837							12	- 13° 929	+ 31° 738				
20	- 63° 191	- 4° 608	65 4017	8.2	12	+ 14° 357	- 40° 951	65 4052	9.6					9	- 12° 490	+ 36° 671				
	101					161									41					
9	- 61° 358	- 7° 566			11	+ 14° 706	- 14° 640	65 4053	9.6					17	- 12° 426	+ 13° 330	64 4290	9.7		
9	- 60° 961	- 3° 852			12	+ 15° 798	- 45° 660	65 4054	9.6					20	- 11° 180	+ 46° 542	64 4291	9.2		
9	- 59° 664	- 18° 592	65 4018	10.2	9	+ 18° 199	- 30° 409							9	- 10° 627	+ 39° 401				
9	- 59° 030	- 17° 993			9	+ 23° 194	- 54° 447							18	- 9° 784	+ 50° 493	64 4292	9.2		
9	- 58° 424	- 38° 148			14	+ 23° 485	- 20° 257	65 4057	9.2					10	- 9° 492	+ 17° 139				
					9	+ 25° 576	- 13° 380							13	- 9° 358	+ 17° 999				
16	- 56° 693	- 43° 667	65 4019	9.4	9	+ 26° 032	- 10° 596							72	- 7° 134	+ 31° 791	64 4293	6.9		
9	- 56° 239	- 11° 192			9	+ 26° 670</														

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	51,					111,					171,				PLATE CENTRE. 22 ^h 57 ^m , - 65°. Plate 467. 1892, Oct. 15. PROVISIONAL CONSTANTS. a = - .01136 d = - .00042 b = + .00047 e = - .01174 c = - .0493 f = + .0325 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					
18	- 2.994	+24.697	64 4294	9.5	12	-30.961	-48.678			11	+42.288	-30.586			12	-59.509	+30.954	64 4304	9.0	
23	- 2.804	+61.699	64 4295	8.4	15	-30.682	- 8.527	65 4076	9.7	10	+43.387	-24.597			16	-50.315	+ 4.666	65 4096	8.6	
9	- 2.502	+ 2.678			30	-28.346	-64.562	66 3695	8.5	12	+44.675	-24.609			9	-47.691	+ 6.079			
10	- 0.319	+39.692			12	-24.111	-19.092			36	+45.606	-27.083	65 4090	8.4	9	-43.124	+37.861			
9	+ 0.299	+30.988			15	-21.495	- 6.495	65 4078	9.5	18	+47.110	-40.370	65 4092	9.4	9	-43.012	+29.311			
12	+ 2.650	+29.516			15	-21.477	-49.813	65 4077	9.4	9	+47.741	- 6.883			9	-42.367	+52.968			
10	+ 4.601	+ 3.270			14	-21.247	-11.346	65 4079	10.0	11	+48.34	- 6.299			9	-39.055	+41.494			
16	+ 4.806	+47.820	64 4296	9.8	16	-19.507	- 7.531	65 4080	9.4	11	+50.381	-47.870			9	-38.355	+48.975			
12	+ 6.320	+39.817			13	-19.152	-19.322			15	+50.627	- 4.739	65 4093	10.0	9	-37.586	+35.150			
12	+ 7.564	+14.636			11	-19.029	-28.233			11	+51.497	- 0.797			10	-32.744	+40.562	64 4305	10.0	
9	+ 7.869	+52.909				121					181					11				
18	+ 9.006	+31.550	64 4297	9.2	11	-18.553	-31.627			10	+52.771	-44.006			9	-32.305	+23.451			
11	+ 9.629	+53.813			14	-17.805	-12.811	65 4081	10.0	22	+54.745	-37.690	65 4094	8.4	9	-28.736	+30.610			
9	+11.844	+63.966			13	-16.800	-48.533			14	+55.234	-20.198			18	-25.523	+16.913	64 4306	8.6	
15	+13.531	+32.029	64 4298	10.0	40	-14.530	-20.254	65 4082	8.2	13	+55.357	-55.392	66 3719	9.8	16	-22.580	+46.005	64 4307	8.8	
13	+15.566	+48.592			11	-13.383	-22.324			22	+58.191	-53.300	65 4095	8.4	9	-16.881	+58.006			
20	+20.433	+ 0.915	65 4087	8.7	18	-13.356	-23.033	65 4083	9.2	10	+58.613	-19.106			9	-11.809	+45.507			
22	+21.329	+55.895	64 4299	8.8	22	-13.254	-10.419	65 4084	8.2	12	+64.649	-15.930			15	- 7.584	+45.325	64 4308	9.2	
76	+22.135	+45.745	64 4300	6.0	35	-13.084	-10.349	65 4085	10.0					24	- 7.008	+10.033	64 4309	7.3		
12	+22.439	+ 1.315			14	-12.906	-29.727							10	- 6.194	+ 9.942	64 4310	9.6		
19	+23.276	+43.902	64 4301	9.0	9	-11.048	-21.213							14	+ 1.732	+29.454	64 4311	9.0		
12	+24.050	+25.757				131									21					
9	+29.525	+17.831			16	-10.764	-53.732	66 3699	9.5	9	+3.094	+67.553			9	+28.207	+21.925			
10	+35.939	+34.247			11	-10.634	-15.692			10	+ 3.905	+44.875	64 4312	9.7	10	+28.746	+20.691	64 4317	9.4	
12	+37.323	+14.369			12	- 9.190	-48.410			13	+ 9.791	+33.898	64 4313	9.2	9	+32.047	+43.150	64 4318	10.1	
10	+38.297	+62.518			11	- 8.241	-13.832			9	+11.541	+16.682	64 4314	10.0	10	+32.654	+23.868	64 4320	9.8	
10	+39.001	+33.840			12	- 5.676	-48.146			9	+16.364	+49.022			9	+32.857	+49.137			
10	+40.154	+23.974			10	- 2.752	-15.273			9	+17.202	+35.451			9	+17.202	+35.451			
9	+43.918	+28.544			10	- 2.410	- 0.896			9	+20.328	+21.655			9	+20.328	+21.655			
9	+45.840	+58.547			11	- 1.950	-30.113			9	+21.013	+58.476	64 4315	10.0	9	+21.013	+58.476			
18	+46.780	+ 1.574	65 4091	9.4	13	- 0.616	-27.030			9	+23.028	+63.953			9	+23.028	+63.953			
9	+48.965	+26.032			12	+ 1.568	-17.811			14	+25.845	+40.556	64 4316	9.1	9	+23.028	+63.953			
52	+51.137	+42.180	64 4302	7.5		141					9	+28.207	+21.925			9	+23.028	+63.953		
17	+52.033	+27.230	64 4303	9.5	12	+ 1.878	-36.687	65 4086	10.0		10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
9	+52.481	+47.684			14	+ 2.071	-30.955	66 3708	9.8		10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
9	+53.580	+ 6.578			12	+ 4.080	-47.800				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
10	+56.420	+50.786			14	+ 5.046	-59.781				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
19	+58.244	+31.232	64 4304	9.0	9	+ 6.095	-23.539				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
9	+59.261	+40.737			10	+ 7.345	-23.338				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
10	+63.091	+51.974			9	+ 8.048	-38.247				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
9	+64.147	+21.981			11	+11.073	- 6.390				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
16	-64.483	-58.085	66 3683	8.8	11	+12.561	-64.896				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
11	-61.624	-39.755			10	+12.766	-48.510				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
10	-60.641	-43.751				151					10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
16	-59.142	-45.456	65 4067	9.2	13	+12.954	-27.754	66 3710	9.0		10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
13	-58.172	-32.206	65 4069	10.0	20	+15.436	-55.245				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
15	-55.597	- 7.259	65 4071	9.7	14	+15.697	-36.183				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
14	-54.060	-37.328			11	+19.541	-18.445				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
10	-53.752	-25.461			11	+20.055	-57.055				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
16	-52.351	- 5.678	65 4073	9.4	10	+21.097	-31.303				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
	101				10	+21.867	- 9.023				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
14	-49.466	- 5.605			11	+23.264	-46.013				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
19	-48.556	- 9.940	65 4074	9.0	9	+23.506	- 7.332				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
11	-46.637	-55.143			10	+24.984	-49.470				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
10	-46.367	-13.911				161					10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
13	-43.491	-15.356			14	+25.192	-50.908	65 4088	10.0		10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
11	-43.050	-32.059			13	+28.513	-43.541				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
13	-40.848	-16.707			11	+28.697	-35.890				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
11	-36.698	-46.866			9	+28.805	-39.722				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
11	-35.480	-13.789			14	+30.209	-35.598				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
15	-33.368	-59.174	66 3691	9.4	12	+30.685	- 2.784				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
					10	+33.419	-46.384				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
					13	+34.983	-44.668				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
					11	+39.939	-10.308				10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		
					34	+41.463	- 2.085	65 4089	8.2		10	+28.746	+20.691	64 4317	9.4	9	+23.028	+63.953		

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE.																			
23h 1 ^m , - 65°.																			
Plate 4061. 1916, Oct. 21.																			
PROVISIONAL CONSTANTS.																			
a = - .01149 d = + .00035																			
b = - .00014 e = - .01152																			
c = - .0962 f = + .0243																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
19	51,				15	51,				11	111,				10				
9	-58.108	-38.020	65 4094	8.4	11	-52.694	-2.551	65 4112	9.8	16	+47.246	-22.956			16	+52.137	-20.110	65 4140	9.4
17	-56.275	-55.652	66 3719	9.8	11	-51.994	-49.194			10	+54.450	-28.773			10	+54.450	-28.773		
9	-53.55	-53.375	65 4095	8.4	22	-51.285	-13.441			15	+55.331	-6.432	65 4141	9.4	15	+55.331	-6.432	65 4141	9.4
14	-49.787	-15.628			12	-49.108	-18.982	65 4114	9.0	12	+57.244	-60.887			12	+57.244	-60.887		
9	-47.309	-2.946	65 4097	9.2	9	-48.662	-16.829			17	+59.084	-24.512	65 4142	9.1					
9	-43.704	-43.388			9	-47.446	-29.654												
10	-37.588	-26.919	65 4098	10.0	12	-43.380	-3.777												
9	-36.896	-46.310			11	-41.571	-36.745												
10	-34.247	-45.040	65 4099	9.8	11	-40.854	-53.991												
11	-33.173	-7.263	65 4100	10.0	22	-39.163	-34.997	65 4115	9.1										
61																			
10	-32.928	-24.321			11	-39.057	-27.000												
28	-31.917	-55.350	66 3724	7.8	24	-37.505	-11.218	65 4116	8.8										
14	-31.138	-64.265	66 3725	8.8	10	-34.723	-26.668												
20	-30.787	-30.597	65 4101	8.8	13	-34.288	-29.122												
9	-29.604	-24.391			24	-33.246	-49.151	65 4118	8.8										
9	-25.266	-11.982			9	-32.746	-36.323												
9	-25.055	-6.706			10	-28.979	-57.025	66 3760	9.4										
15	-25.049	-34.509	65 4102	8.8	17	-23.799	-59.415	66 3764	9.4										
10	-22.926	-62.325	66 3727	9.5	17	-21.670	-43.282	65 4119	9.4										
10	-22.221	-0.283	65 4103	9.8	17	-18.744	-36.737	65 4120	9.2										
71																			
12	-16.007	-24.153	65 4104	9.2	11	-18.535	-41.080												
9	-14.632	-9.872			12	-18.082	-51.632												
9	-14.360	-21.165			14	-16.583	-25.759												
9	-12.159	-34.236			34	-14.341	-51.614	65 4121	8.4										
9	-12.090	-5.502			13	-14.299	-39.983												
9	-7.428	-34.579	65 4105	10.0	9	-10.856	-32.505												
9	-7.157	-55.005			17	-9.620	-9.174	65 4122	9.2										
9	-5.269	-60.086			12	-7.511	-3.296	65 4123	10.1										
9	-4.035	-12.075			13	-5.059	-43.997												
18	-2.397	-35.735	65 4106	9.0	11	-4.387	-35.163												
81																			
9	+10.672	-47.628			20	-4.184	-10.893	65 4124	9.0										
9	+13.491	-2.658	65 4107	9.7	26	-3.243	-15.151	65 4125	8.4										
9	+14.836	-54.110			14	+0.485	-25.210	65 4126	10.0										
13	+16.083	-53.486	66 3741	9.0	15	+0.668	-45.776	65 4128	9.2										
9	+17.927	-62.108			20	+0.711	-35.311	65 4129	9.2										
9	+25.595	-9.641			13	+0.899	-44.814	65 4130	10.1										
9	+27.632	-28.649			13	+3.267	-46.364	65 4131	10.1										
15	+29.805	-1.828	65 4108	9.0	10	+4.829	-20.749												
9	+33.522	-20.486			15	+5.608	-24.253	65 4132	10.0										
9	+34.306	-32.855			40	+8.977	-49.233	65 4133	7.8										
91																			
	+38.803	-25.391			13	+12.968	-15.722	65 4134	10.1										
9	+41.077	-1.254			13	+13.139	-38.042												
10	+42.815	-51.300	65 4109	9.4	34	+14.145	-26.793	65 4135	8.2										
9	+43.721	-54.195	66 3747	9.4	11	+14.480	-46.387												
9	+53.778	+22.774			9	+14.607	-5.987												
11	+56.643	-13.583	65 4110	9.6	13	+16.210	-5.023												
11	+56.957	-11.182	65 4111	9.6	12	+19.840	-28.688												
9	+62.584	-2.900	65 4112	9.8	14	+25.491	-4.572	65 4136	9.6										
9	+63.233	-13.867			10	+27.906	-27.480												
					10	+29.047	-60.926												
101																			
					14	+29.200	-25.550	65 4137	9.8										
					13	+30.634	-59.947	66 3772	10.0										
					14	+30.932	-20.064	65 4138	9.8										
					13	+31.100	-15.692	65 4139	10.1										
					12	+31.389	-49.441												
					12	+32.225	-15.323												
					10	+36.732	-45.692												
					9	+40.590	-31.508												
					13	+44.652	-9.663												
					9	+47.166	-21.155												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.					
PLATE CENTRE. 23 ^h 33 ^m , - 65°. Plate 4062. 1916, Oct. 21. PROVISIONAL CONSTANTS. $a = -.01157$ $d = -.00040$ $b = +.00050$ $e = -.01147$ $c = -.1168$ $f = -.0271$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51, 9 +24.321 +53.396 10 +26.898 +4.918 13 +28.208 +39.199 22 +30.673 +18.191 10 +32.858 +3.446 28 +33.525 +29.215 9 +35.117 +32.016 22 +35.749 +27.941 46 +36.666 +2.038 36 +37.341 +6.011 61 12 +39.020 +2.656 10 +40.671 +31.351 15 +41.305 +51.119 9 +43.409 +27.097 14 +43.444 +48.988 10 +44.655 +16.958 9 +46.252 +33.424 23 +48.932 +21.153 23 +52.682 +7.342 12 +55.484 +23.861 71 10 +56.481 +19.068 13 +58.410 +45.709 21 +60.234 +14.833 11 +63.456 +1.507 15 -61.908 -20.415 16 -59.710 -6.533 11 -58.966 -28.882 10 -58.060 -39.524 18 -54.673 -24.289 11 -53.902 -60.687 81 15 -46.366 -55.949 12 -44.875 -20.615 16 -43.477 -59.867 11 -42.774 -34.792 9 -41.299 -17.726 12 -40.565 -37.738 9 -37.446 -31.633 14 -36.545 -52.090 11 -35.943 -22.359 10 -35.170 -32.491 91 11 -33.568 -41.484 11 -29.160 -18.624 10 -29.035 -6.213 15 -28.645 -50.175 10 -26.762 -31.005 13 -26.280 -60.734 18 -25.009 -22.105 42 -22.058 -14.832 11 -21.846 -46.200 11 -21.765 -7.040 101 17 -21.606 -14.388 14 -20.939 -8.402 12 -20.194 -18.083 9 -19.056 -6.984 13 -16.332 -5.808 9 -15.753 -14.159 12 -15.373 -10.357 15 -15.293 -46.253 11 -13.561 -37.893 10 -10.151 -20.104					111, 15 -9.690 -8.222 10 -8.784 -53.099 9 -7.749 -42.344 11 -7.503 -1.317 14 -6.470 -2.276 12 -6.217 -61.080 13 -5.322 -7.602 21 -4.101 -53.767 10 -3.189 -32.618 10 -0.754 -41.689 121 10 -0.384 -38.117 13 +0.647 -43.342 13 +3.581 -5.767 11 +4.209 -44.772 14 +5.015 -11.050 17 +7.906 -64.425 9 +9.863 -28.083 11 +10.388 -62.425 14 +12.147 -25.422 10 +13.537 -20.283 131 28 +13.791 -50.459 18 +13.961 -62.638 11 +14.300 -52.258 10 +21.887 -0.418 17 +22.267 -23.167 11 +24.314 -58.160 11 +26.124 -53.027 10 +26.708 -33.209 9 +26.811 -3.438 12 +26.958 -43.832 141 11 +47.910 -5.115 12 +28.181 -24.473 13 +29.347 -20.836 30 +31.634 -60.146 18 +33.566 -63.784 20 +37.564 -14.423 17 +38.302 -0.397 12 +43.027 -13.204 12 +44.912 -35.381 12 +45.970 -20.598 151 20 +48.189 -6.641 11 +48.896 -24.617 20 +49.994 -13.092 26 +51.588 -8.593 9 +52.229 -30.780 12 +52.682 -29.764 11 +52.780 -6.482 15 +52.998 -22.744 9 +53.687 -5.771 9 +54.335 -56.765 161 20 +54.346 -23.465 14 +54.930 -30.041 11 +55.391 -27.988 50 +57.488 -49.354 15 +64.417 -59.083 10 +64.899 -31.884					PLATE CENTRE. 23 ^h 51 ^m , - 65°. Plate 4000. 1915, Nov. 5. PROVISIONAL CONSTANTS. $a = -.01165$ $d = +.00058$ $b = -.00052$ $e = -.01146$ $c = +.0758$ $f = -.0793$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					24 -63.516 +7.034 12 -61.857 +23.689 10 -60.546 +18.973 15 -60.467 +45.688 24 -56.498 +15.038 9 -52.553 +49.894 12 -52.368 +1.968 10 -49.821 +4.374 15 -49.534 +56.015 12 -49.477 +17.131 11 -48.438 +0.378 9 -46.777 +12.534 9 -43.709 +57.821 11 -43.604 +62.851 12 -42.435 +49.210 9 -38.824 +41.538 10 -37.904 +35.743 11 -32.645 +33.451 10 -30.670 +19.186 10 -27.434 +0.317 21 9 -24.559 +63.034 10 -23.416 +35.100 9 -22.967 +39.179 11 -22.954 +13.503 16 -21.804 +26.973 9 -16.902 +44.609 10 -16.684 +18.469 13 -15.774 +10.195 11 -15.441 +19.827 15 -11.468 +0.870 31 18 -10.322 +19.183 9 -8.059 +60.214 15 -7.425 +0.531 14 +2.743 +10.170 19 +4.696 +59.725 12 +4.909 +38.799 22 +7.220 +12.258 11 +7.678 +34.152 84 +8.583 +8.921 10 +22.502 +39.440 41 24 +23.677 +4.045 10 +23.782 +13.718 13 +24.645 +23.241 16 +27.087 +14.566 12 +33.196 +55.075 22 +36.944 +42.749 10 +37.659 +39.056 10 +37.980 +60.013 10 +42.029 +55.606 16 +43.511 +1.055				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					81,					111,					141,			
20	+47'810	+42'394	64 4394	9'2	11	-48'583	-31'237			13	+3'544	-36'235			11	+43'438	-28'245		
12	+48'235	+44'798	64 4395	10'4	18	-47'164	-58'400	66 3797	9'1	13	+4'211	-15'553	65 4184	10'1	9	+44'499	-58'095		
11	+48'298	+26'247			10	-43'163	-50'139			9	+8'598	-55'154			9	+45'816	-41'253		
9	+48'318	+5'261			10	-43'055	-55'664	66 3800	10'4	9	+8'723	-54'773			16	+46'274	-2'607	65 4195	9'5
44	+50'482	+50'427	64 4396	8'6	11	-41'673	-0'165			9	+8'835	-31'458			11	+46'353	-34'544		
15	+51'284	+50'316	64 4397	10'0	9	-40'538	-33'244			9	+9'411	-30'945			9	+46'394	-28'987		
9	+52'348	+46'223			11	-37'988	-4'726			14	+9'735	-3'964	65 4185	9'8	9	+47'584	-11'588		
10	+52'642	+21'717			9	-37'816	-37'564			9	+10'571	-29'552			12	+49'885	-16'802	65 4196	10'6
11	+52'896	+36'330			9	-36'318	-46'519			11	+10'825	-26'558			16	+52'916	-26'196	65 4197	9'8
22	+54'666	+15'117	64 4399	9'5	9	-34'852	-34'775			11	+11'324	-25'568			20	+56'509	-56'047	66 3824	9'1
	61					91					121					151			
12	+55'470	+62'627	64 4398	10'0	9	-34'281	-2'560			9	+19'554	-44'289			9	+59'054	-61'823		
13	+55'540	+1'949	65 4198	10'1	10	-33'076	-14'834			14	+20'276	-29'269	65 4186	9'8	9	+60'668	-38'265		
10	+60'475	+12'685			26	-32'478	-53'119	66 3803	8'6	11	+20'920	-23'875			9	+61'305	-57'170		
10	+61'661	+8'281			42	-29'197	-22'028	65 4175	8'0	9	+21'299	-57'044			15	+64'000	-1'526	65 4199	9'6
12	+61'912	+22'394	64 4401	10'1	14	-25'722	-22'831	65 4176	9'8	12	+21'387	-36'645	65 4187	10'6	9	+64'224	-63'111		
18	+62'711	+9'138	64 4402	9'8	12	-25'136	-33'019			11	+21'848	-13'044							
22	-64'746	-13'544	65 4165	9'0	11	-24'283	-49'904			9	+22'904	-62'906							
38	-63'466	-8'942	65 4166	8'0	18	-21'875	-2'865	65 4177	9'4	9	+23'750	-53'847							
9	-62'416	-6'759			9	-21'123	-42'997			16	+26'762	-2'966	65 4189	9'6					
9	-61'583	-5'991			22	-20'855	-41'606	65 4178	9'1	12	+27'614	-0'212							
	71					101					131								
10	-61'291	-31'024			10	-16'483	-29'850			12	+28'592	-13'384							
16	-61'080	-22'957	65 4169	9'6	9	-12'174	-31'198			15	+28'805	-62'435	66 3820	9'9					
12	-60'907	-29'973	65 4168	10'4	12	-11'777	-55'486			38	+29'012	-1'594	65 4190	8'4					
24	-59'688	-23'571	65 4170	9'1	9	-8'923	-16'070			14	+32'319	-1'441	65 4191	9'8					
15	-58'666	-30'109	65 4171	9'8	12	-6'403	-37'893			22	+84'850	-19'634	65 4192	9'1					
12	-58'329	-28'019	65 4172	10'2	12	-6'163	-1'590			9	+35'404	-47'082							
9	-57'359	-56'802			16	-5'977	-54'739	66 3814	9'6	11	+36'406	-1'525							
56	-54'742	-49'192	65 4173	7'5	14	-0'186	-20'068	65 4181	9'8	22	+36'952	-24'671	65 4193	9'2					
9	-49'426	-3'301			13	+0'552	-15'287	65 4182	9'8	10	+41'318	-16'812							
26	-48'796	-18'004	65 4174	8'8	16	+0'840	-13'750	65 4183	9'6	10	+42'961	-27'668							

ZONE - 66°

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.			No.	Mag.	Diam.			No.	Mag.	Diam.			No.	Mag.	Diam.			No.	Mag.
PLATE CENTRE.																			
0h 0m, - 66°.																			
Plate 806. 1893, Oct. II.																			
PROVISIONAL CONSTANTS.																			
a = - .01159 d = - .00030																			
b = + .00049 e = - .01124																			
c = - .1061 f = + .0024																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	111				PLATE CENTRE. 0h 18m, - 66°. Plate 4064. 1916, Oct. 21. PROVISIONAL CONSTANTS. a = - .01180 d = - .00053 b = + .00066 e = - .01127 c = - .1468 f = + .1832 To obtain standard co-ordinates, ξ, η $\xi = x + ax' + by + c$ $\eta = y + dx + ey + f$																
25	+31.759	-56.208	67	7	9.1					9	+10.209	+62.991			10	111					
21	+34.729	-62.451	67	8	10.0					9	+19.482	+51.322			9	-14.451	-38.475				
11	+36.868	-42.075								20	+19.039	+30.466	65	28	9.4	10	-13.731	-43.666			
12	+38.424	-47.590								10	+20.403	+ 0.473				10	-10.668	-14.285			
20	+42.717	-60.682	67	9	10.4					9	+22.832	+33.850				15	-10.424	- 0.622	66	20	9.8
																28	- 7.921	-57.934	67	22	8.7
11	+45.241	-34.382								10	+23.788	+39.048				9	- 7.907	-43.705			
13	+47.860	- 5.464								10	+26.187	+ 1.028				40	- 7.189	-18.819	66	21	8.0
22	+49.627	-64.341								18	+26.383	+50.530	65	29	9.5	43	- 6.645	-52.347	66	22	7.2
12	+49.740	-19.871								14	+26.610	+54.452	65	30	10.2	20	- 6.640	-63.040	67	23	9.4
13	+49.821	-13.531	66	8	10.4					17	+31.157	+ 9.206	65	31	10.0	9	- 4.872	-48.284			
24	+52.323	-31.244	66	9	9.2																
11	+52.612	- 7.660								12	+31.947	+14.107				9	- 4.225	-45.376			
16	+54.083	-22.233								14	+34.357	+35.272	65	33	10.4	9	+ 0.510	-58.872			
11	+57.535	-27.719	66	11	10.0					15	+35.975	+39.396	65	34	9.8	17	+ 1.587	-64.842	67	24	9.6
18	+60.918	-11.320	66	12	9.8					41	+36.487	+42.963	65	35	7.8	11	+ 2.893	- 2.640			
										11	+40.648	+36.039	65	36	10.5	12	+ 3.435	-26.728	66	23	10.6
12	+62.966	- 3.821								14	+41.377	+60.631	65	37	10.0	11	+ 5.339	- 8.517			
15	+64.978	-10.480								26	+41.746	+10.840	65	39	9.0	9	+ 5.778	-58.703			
										13	+41.787	+64.383				10	+ 5.901	-62.135			
										10	+43.905	+29.441				9	+ 8.312	-60.088			
										11	+49.838	+59.397	65	40	10.8	13	+12.102	-47.879	66	24	10.2
										71											
										12	+50.107	+43.332	65	41	10.4	22	+12.852	-62.851	67	27	9.1
										16	+51.441	+64.655	65	42	9.8	10	+13.650	-31.485			
										13	+51.634	+13.193	65	43	10.4	11	+14.119	-45.771			
										11	+53.274	+14.631				14	+14.273	-52.453	66	25	9.8
										12	+53.606	+36.652	65	44	10.4	16	+17.764	-20.937	66	28	9.8
										14	+54.963	+55.487	65	45	10.2	15	+23.530	-54.757	67	28	9.8
										12	+57.335	+36.892	65	46	10.2	10	+24.418	-19.426			
										18	+57.980	+12.745	65	48	9.4	11	+25.213	-30.921			
										12	+58.444	+48.931	65	47	10.2	10	+28.142	-31.665			
										12	+62.566	+23.716	65	49	10.4	15	+31.194	-61.358	67	29	9.6
										81											
										10	+63.023	+ 5.508				22	+33.109	-45.192	66	29	9.0
										10	-64.017	-61.681	67	9	10.4	36	+34.637	-28.818	66	31	8.2
										12	-62.840	- 6.215				12	+34.953	- 9.237	66	30	10.8
										12	-60.297	-14.146	66	8	10.4	17	+35.274	-28.526	66	32	9.4
										12	-59.926	-20.475				11	+38.377	-10.682			
										11	-57.936	- 8.084				10	+42.302	-44.525			
										22	-56.549	-31.641	66	9	9.2	20	+44.736	-44.358	66	33	9.4
										13	-55.420	-22.524				9	+45.358	-58.719			
										16	-51.601	-27.740	66	11	10.0	10	+46.536	-55.144	67	31	10.6
										16	-49.434	-11.134	66	12	9.8	9	+47.526	-35.987			
										91											
										10	-47.915	- 3.529				14	+48.615	-12.518	66	34	10.0
										12	-45.412	- 9.994				10	+50.130	- 9.395			
										14	-42.059	-39.324	66	13	10.1	10	+57.686	-63.291	67	33	10.2
										18	-35.803	-12.210	66	14	9.6	12	+58.252	-18.291	66	35	10.4
										10	-35.670	-12.555				21	+61.398	-40.701	66	36	9.4
										10	-35.015	-42.075				11	+61.663	-34.398	66	37	10.6
										21	-32.474	-13.724	66	15	9.2	10	+63.058	- 9.806			
										9	-32.208	-41.682				9	+64.920	-63.503	67	35	10.8
										15	-30.036	- 9.356	66	16	9.8						
										36	-29.627	-56.003	67	17	7.9						
										101											
										13	-24.612	-10.504	66	17	10.0						
										14	-22.778	-60.320	67	20	9.8						
										9	-21.694	-47.614									
										11	-21.052	-12.952									
										9	-20.976	-36.093									
										12	-19.737	-42.154									
										10	-19.370	-24.301									
										16	-19.172	-12.131	66	19	9.8						
										14	-19.156	-27.639	66	18	9.8						
										10	-16.736	-55.199									

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 0h 36m, - 66°. Plate 4003. 1915, Nov. 5. PROVISIONAL CONSTANTS. $a = -0.01172$ $d = +0.00058$ $b = -0.00085$ $e = -0.01152$ $c = +0.0323$ $f = +0.0415$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																			
51					111					171									
9	-7°856	+18°149			20	-63°434	-44°868	66	33	9°4	10	+0°335	-59°169						
9	-7°809	+51°998			16	-61°814	-12°828	66	34	10°0	11	+0°500	-14°817						
10	-7°289	+9°531			10	-61°248	-36°310				9	+0°519	-48°039						
9	-6°270	+36°635			11	-60°907	-55°496	67	31	10°6	9	+1°440	-0°860						
14	-5°647	+58°341	65	°65	10°2	11	-60°512	-9°609			9	+1°791	-42°922						
9	-5°541	+35°677				9	-57°594	-24°237			9	+2°181	-18°869						
9	-5°341	+34°323				9	-56°302	-32°774			20	+3°329	-24°714	66	46	9°4			
13	-3°970	+15°847	65	66	10°5	13	-51°812	-17°908	66	35	10°4	23	+5°771	-64°563	67	48	9°2		
13	-3°232	+31°232	65	67	10°8	9	-49°839	-35°402			13	+8°214	-56°722	67	50	10°4			
9	+3°978	+50°227				12	-49°203	-62°825	67	33	10°2	11	+8°728	-14°683					
61					121					181									
11	+4°494	+28°045			12	-47°612	-9°101				74	+13°557	-1°181	66	47	6°0			
12	+7°042	+32°445			12	-47°265	-33°731	66	37	10°6	9	+14°361	-42°517						
40	+8°910	+57°175	65	68	8°2	22	-47°094	-40°045	66	36	9°4	58	+14°888	-9°636	66	50	6°8		
11	+12°213	+28°891				10	-45°903	-30°791			9	+16°628	-13°684						
15	+13°497	+57°376	65	69	10°2	9	-45°690	-44°756			9	+17°622	-22°353						
20	+13°849	+3°944	66	48	9°4	11	-41°946	-62°530	67	35	10°8	9	+17°749	-54°151					
22	+14°592	+14°645	65	70	9°4	17	-41°875	-3°254	66	38	10°0	10	+20°108	-32°162					
17	+14°823	+2°727	66	49	9°8	10	-41°706	-33°897			12	+20°232	-52°750						
20	+15°423	+28°571	65	71	10°0	9	-41°603	-18°434			12	+22°948	-10°258						
12	+16°444	+41°389	65	72	10°6	17	-39°726	-19°832	66	39	9°8	16	+23°960	-50°787	66	51	9°8		
71					131					191									
11	+17°407	+34°599			11	-38°761	-45°839				13	+26°963	-30°123	66	54	10°6			
34	+19°052	+38°234	65	73	8°6	10	-38°135	-30°995			60	+27°012	-11°192	66	53	7°2			
14	+19°518	+22°971	65	74	10°2	9	-36°738	-38°756			11	+30°435	-55°095						
30	+20°549	+24°066	65	75	9°0	12	-30°114	-3°564			12	+30°789	-1°677						
16	+22°295	+49°757	65	76	10°2	11	-35°881	-29°296			11	+30°825	-34°373						
9	+22°540	+31°216				11	-35°112	-6°840			9	+32°946	-55°944						
10	+23°134	+12°510				14	-34°736	-63°106	67	39	10°0	9	+34°344	-23°341					
22	+23°297	+56°104	65	77	9°4	9	-31°298	-43°833			10	+34°629	-9°511						
9	+23°557	+43°170				9	-30°892	-5°795			10	+36°263	-30°931						
12	+24°003	+60°192				9	-26°896	-18°143			12	+36°345	-10°724						
81					141					201									
9	+24°609	+9°003			11	-26°143	-39°221				9	+36°787	-57°264						
10	+24°610	+32°752			13	-26°059	-21°833	66	40	10°6	9	+37°294	-1°243						
13	+26°497	+0°339	66	52	10°4	11	-25°671	-7°299			13	+39°226	-20°233	66	55	10°9			
12	+27°346	+57°844	65	78	10°6	12	-25°585	-2°049			11	+44°469	-6°907						
10	+29°004	+10°681				10	-23°720	-7°080			10	+48°670	-63°275						
9	+31°737	+40°026				9	-22°945	-36°723			18	+49°022	-50°850	66	56	9°8			
10	+33°931	+15°886				9	-22°017	-49°879			12	+49°523	-43°743						
20	+34°377	+10°554	65	80	9°8	18	-21°634	-48°329	66	41	9°8	9	+52°325	-10°057					
15	+34°625	+35°485	65	79	10°2	10	-20°883	-59°563			13	+52°373	-38°893	66	58	10°9			
24	+35°221	+17°004	65	81	9°2	10	-19°116	-39°222			28	+52°542	-7°923	66	57	8°8			
91					151					211									
10	+36°014	+40°258			11	-16°727	-49°604				18	+55°822	-24°957	66	59	10°2			
10	+38°044	+0°279			9	-15°122	-52°778				10	+55°828	-16°783						
15	+39°166	+58°933	65	82	10°2	11	-15°095	-34°944			16	+56°735	-14°210	66	60	10°0			
10	+40°866	+1°139				16	-14°038	-48°406	66	42	10°0	12	+57°663	-36°721	66	61	10°8		
10	+42°950	+16°903				40	-13°430	-36°155	66	43	7°8	9	+58°776	-39°795					
10	+44°888	+39°978				12	-12°089	-4°402	66	44	10°4	10	+59°862	-39°711					
10	+45°538	+13°782				10	-11°040	-13°227			10	+60°664	-47°454						
12	+46°824	+24°689	65	83	10°8	12	-10°635	-13°240			14	+61°231	-27°814	66	62	10°6			
10	+47°960	+41°928				10	-10°485	-64°834	67	46	10°9	22	+62°046	-46°803	66	63	9°4		
11	+48°010	+25°783				9	-9°545	-33°923			10	+64°645	-34°365						
101					161					221									
10	+51°220	+19°784			16	-9°451	-63°548	67	47	10°0									
20	+52°344	+20°810	65	85	9°2	11	-6°281	-43°080											
14	+52°408	+20°735				9	-6°057	-16°684											
10	+55°670	+28°109				12	-6°031	-37°715											
9	+56°465	+8°568				9	-5°642	-12°026											
10	+56°838	+49°655				12	-5°125	-58°820											
10	+58°492	+20°981				9	-4°426	-45°080											
34	+58°570	+26°201	65	86	8°6	10	-4°197	-21°301											
9	+62°434	+8°009				11	-1°465	-54°166											
9	+64°610	+22°185				14	-0°211	-22°615	66	45	10°2								

C.P.D.					C.P.D.					C.P.D.					C.P.D.									
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.					
PLATE CENTRE. 0h 54m, - 66°. Plate 493. 1892, Nov. 14. PROVISIONAL CONSTANTS. a = - .01160 d = - .00225 b = + .00253 e = - .01158 c = + .0396 f = + .0735 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51 9 + 4.178 + 44.182 10 + 4.232 + 43.507 9 + 5.872 + 5.580 10 + 8.679 + 46.896 9 + 10.239 + 63.517 11 + 13.096 + 29.923 17 + 17.058 + 48.196 9 + 21.200 + 55.285 10 + 21.432 + 46.280 12 + 23.295 + 47.332 61 15 + 25.884 + 57.522 16 + 27.987 + 32.361 10 + 29.482 + 19.052 36 + 30.110 + 0.089 16 + 37.949 + 21.460 16 + 37.980 + 29.443 10 + 38.398 + 17.817 9 + 39.944 + 44.747 9 + 40.719 + 43.843 10 + 41.002 + 51.713 71 20 + 42.607 + 45.725 10 + 44.816 + 64.390 9 + 47.229 + 2.505 9 + 53.035 + 55.626 10 + 54.747 + 16.618 16 + 55.817 + 41.163 9 + 60.403 + 12.934 11 + 62.250 + 14.026 12 + 58.366 + 51.314 20 + 58.037 + 8.262 81 9 + 55.902 + 39.163 14 + 53.461 + 24.988 16 + 53.395 + 14.220 11 + 50.763 + 36.591 13 + 47.893 + 27.444 16 + 45.703 + 46.336 10 + 44.274 + 13.099 10 + 44.005 + 33.715 10 + 43.921 + 24.908 10 + 41.527 + 50.080 91 9 + 40.082 + 12.985 10 + 26.523 + 25.713 10 + 26.361 + 40.966 12 + 25.883 + 0.219 22 + 25.081 + 25.235 18 + 23.819 + 40.298 10 + 22.967 + 23.103 16 + 21.477 + 31.749 18 + 20.627 + 0.537 26 + 20.483 + 0.316 101 13 + 19.983 + 61.235 12 + 14.778 + 52.326 11 + 14.443 + 40.824 9 + 11.442 + 18.439 10 + 11.369 + 48.877 9 + 9.796 + 22.275 9 + 7.553 + 15.984 9 + 7.067 + 3.891 9 + 5.568 + 53.159 19 + 3.439 + 50.698					111 15 + 3.134 + 40.962 11 + 1.932 + 50.283 18 + 0.266 + 18.986 9 + 2.406 + 29.153 12 + 2.753 + 30.986 14 + 3.897 + 24.687 12 + 9.098 + 60.554 14 + 9.387 + 15.727 10 + 11.494 + 0.032 14 + 13.070 + 30.966 121 9 + 16.245 + 15.305 9 + 16.548 + 12.047 12 + 16.650 + 42.619 15 + 18.079 + 61.031 16 + 19.543 + 53.072 11 + 23.144 + 54.381 16 + 24.087 + 33.241 12 + 24.221 + 28.241 19 + 24.910 + 11.826 12 + 29.539 + 26.551 131 10 + 32.883 + 63.906 11 + 34.111 + 32.371 12 + 34.753 + 2.335 9 + 34.984 + 19.388 10 + 36.696 + 2.410 14 + 41.186 + 49.744 10 + 41.498 + 36.401 12 + 45.224 + 12.146 10 + 45.795 + 32.789 10 + 47.509 + 42.716 141 15 + 47.762 + 36.784 9 + 50.749 + 44.076 9 + 51.180 + 53.914 18 + 53.254 + 12.478 17 + 55.289 + 25.042 10 + 58.831 + 40.316					PLATE CENTRE. 1h 12m, - 66°. Plate 494. 1892, Nov. 14. PROVISIONAL CONSTANTS. a = - .01169 d = - .00256 b = + .00236 e = - .01144 c = + .1233 f = + .0466 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					22 + 58.383 + 40.841 12 + 50.015 + 14.226 10 + 46.810 + 61.251 11 + 45.352 + 40.713 9 + 44.621 + 33.876 11 + 41.135 + 51.247 16 + 40.077 + 13.936 12 + 38.642 + 23.314 9 + 35.147 + 62.706 15 + 33.801 + 57.561 11 + 22.633 + 56.285 11 + 22.549 + 52.491 10 + 21.330 + 33.854 9 + 21.046 + 25.664 9 + 19.112 + 35.045 15 + 17.231 + 51.384 27 + 12.417 + 26.335 10 + 9.057 + 17.287 17 + 8.476 + 4.926 20 + 7.396 + 34.797 21 + 6.565 + 43.370 10 + 8.556 + 12.929 14 + 8.653 + 38.822 9 + 10.155 + 50.199 10 + 11.755 + 33.539 10 + 11.915 + 12.741 30 + 12.548 + 15.781 10 + 17.124 + 10.345 9 + 17.628 + 33.111 20 + 17.685 + 51.079 10 + 18.103 + 53.237 11 + 22.507 + 33.047 16 + 24.467 + 29.715 9 + 28.146 + 64.217 10 + 29.679 + 25.785 10 + 34.928 + 16.705 14 + 41.976 + 10.016 10 + 50.267 + 54.554 14 + 50.390 + 1.055 10 + 52.133 + 17.440 41 + 53.971 + 34.506 10 + 54.371 + 14.455 11 + 55.535 + 16.977 11 + 57.543 + 51.139 9 + 63.070 + 33.679 11 + 60.802 + 37.497 9 + 57.301 + 44.561 16 + 57.074 + 12.860 16 + 54.147 + 25.253 9 + 49.529 + 40.236				
17	-60.384	+20.391	65°	85	9.2	15	-60.316	+20.325	65	102	8.8	9	+16.245	-15.305	66	73	10.0	22	-58.383	+40.841	65°	114	9.2	
15	-60.316	+20.325				16	+27.987	+32.361				9	+16.548	-12.047				12	-50.015	+14.226				
9	-58.067	+49.494				10	+29.482	+19.052				12	+16.650	-42.619				10	-46.810	+61.251				
9	-57.604	+27.908				36	+30.110	+0.089				15	+18.079	-61.031				11	-45.352	+40.713				
26	-54.583	+26.231				16	+37.949	+21.460				16	+19.543	-53.072				9	-44.621	+33.876				
9	-49.363	+8.382	65	86	8.6	16	+37.980	+29.443	65	110	9.4	11	+23.144	-54.381	66	74	9.0	11	-41.135	+51.247	65	115	9.8	
9	-44.231	+50.099				10	+38.398	+17.817				16	+24.087	-33.241				16	-40.077	+13.936				
14	-44.079	+45.784				9	+39.944	+44.747				12	+24.221	-28.241				12	-38.642	+23.314				
9	-40.897	+0.140				9	+40.719	+43.843				19	+24.910	-11.826				9	-35.147	+62.706				
9	-40.517	+12.222				10	+41.002	+51.713				12	+29.539	-26.551				15	-33.801	+57.561				
9	-40.245	+29.783	65	87	10.0	20	+42.607	+45.725	65	109	9.7	10	+32.883	-63.906	66	75	10.4	11	-41.135	+51.247	65	116	9.7	
11	-39.908	+6.528				10	+44.816	+64.390				11	+34.111	-32.371				16	-40.077	+13.936				
16	-39.810	+6.334				9	+47.229	+2.505				12	+34.753	-2.335				12	-38.642	+23.314				
9	-38.373	+53.496				9	+53.035	+55.626				9	+34.984	-19.388				9	-35.147	+62.706				
9	-38.278	+9.144				10	+54.747	+16.618				10	+36.696	-2.410				15	-33.801	+57.561				
9	-38.202	+16.452	66	88	10.9	16	+55.817	+41.163	65	112	8.0	14	+41.186	-49.744	66	76	10.0	11	-41.135	+51.247	65	117	9.6	
16	-37.711	+6.712				9	+60.403	+12.934				11	+34.111	-32.371				16	-40.077	+13.936				
9	-34.699	+3.937				12	+62.250	+14.026				12	+34.753	-2.335				12	-38.642	+23.314				
9	-34.593	+3.931				20	+58.037	+8.262				10	+45.795	-32.789				9	-35.147	+62.706				
19	-33.982	+36.654				81	+55.902	+39.163				10	+47.509	-42.716				15	-33.801	+57.561				
11	-31.116	+64.529	65	89	8.8	9	-55.902	-39.163	66	56	9.8	15	+47.762	-36.784	66	77	10.6	11	-41.135	+51.247	65	118	9.5	
9	-30.077	+32.759				14	-53.461	-24.988				9	+50.749	-44.076				13	-22.633	+56.285				
10	-28.810	+31.993				16	-53.395	-14.220				9	+51.180	-53.914				11	-22.549	+52.491				
12	-28.730	+20.221				11	-50.763	-36.591				18	+53.254	-12.478				10	-21.330	+33.854				
9	-28.134	+41.727				13	-47.893	-27.444				17	+55.289	-25.042				9	-21.046	+25.664				
12	-26.653	+9.528	65	90	9.8	16	-45.703	-46.336	66	57	8.8	10	+58.831	-40.316	66	78	10.0	9	-21.046	+25.664	65	119	9.7	
14	-25.079	+9.634				10	-44.274	-13.099				10	+58.831	-40.316				9	-19.112	+35.045				
16	-24.644	+28.179				10	-44.005	-33.715				10	+58.831	-40.316				9	-19.112	+35.045				
10	-20.548	+26.463				10	-43.921	-24.908				10	+58.831	-40.316				9	-19.112	+35.045				
10	-19.308	+21.712				10	-41.527	-50.080				10	+58.831	-40.316				9	-19.112	+35.045				
9	-17.755	+28.013	65	91	10.2	91	+55.902	-39.163	66	58	10.9	10	+58.831	-40.316	66	79	10.6	11	-41.135	+51.247	65	120	9.2	
9	-16.426	+28.099				9	-40.082	-12.985				10	+58.831	-40.316				13	-22.633	+56.285				
11	-16.051	+45.654				10	-26.523	-25.713				10	+58.831	-40.316				11	-22.549	+52.491				
9	-14.745	+32.172				10	-26.361	-40.966				10	+58.831	-40.316				10	-21.330	+33.854				
9	-13.655	+55.089				12	-25.883	-0.219				10	+58.831	-40.316				9	-21.046	+25.664				
9	-13.308	+16.514	65	92	10.4	22	-25.081	-25.235	66	59	9.6	10	+58.831	-40.316	66	80	9.5	9	-21.046	+25.664	65	121	9.2	
19	-12.988	+15.408				18	-23.819	-40.298				10	+58.831	-40.316				9	-19.112	+35.045				
16	-10.616	+1.041				10	-22.967	-23.103				10	+58.831	-40.316				9	-19.112	+35.045				
15	-10.424	+28.933				16	-21.477	-31.749				10	+58.831	-40.316				9	-19.112	+35.045				
10	-9.008	+17.759				18	-20.627	-0.537				10	+58.831	-40.316				9	-19.112	+35.045				
9	-8.670	+20.208	65	93	10.6	101	+55.902	-39.163	66	60	10.0	10	+58.831	-40.316	66	81	10.4	11	-41.135	+51.247	65	122	9.7	
11	-5.731	+7.219				26	-20.483	-0.316				10	+58.831	-40.316				10	-21.330	+33.854				
15	-4.831	+33.916				13	-19.983	-61.235				10	+58.831	-40.316				9	-21.046	+25.664				
10	-4.496	+4.733				12	-14.778	-52.326				10	+58.831	-40.316				9	-21.046	+25.664				
16	-1.959	+10.993				11	-14.443	-40.824				10	+58.831	-40.316				9	-21.046	+25.664				
9	+0.835	+61.398	65	94	10.0	9	-9.796	-22.275	66	61	10.8	10	+58.831	-40.316	66	82	9.8	9	-21.046	+25.664	65	123	9.5	
17	+1.142	+45.295				10	-11.442	-18.439				10	+58.831	-40.316				10	-21.330	+33.854				
20	+1.420	+42.275				10	-11.369	-48.877				10	+58.831	-40.316				10	-21.330	+33.854				
9	+2.898	+2.052				9	-7.553	-15.984				10	+58.831	-40.316				10	-21.330	+33.854				
9	+4.050	+43.004				9	-7.067	-3.891				10	+58.831	-40.316				10	-21.330	+33.854				
9	+0.835	+61.398	65	95	10.6	19	-3.439	-50.698	66	62	10.6	10	+58.831	-40.316	66	83	9.5	9	-21.046	+25.664	65	124	9.2	
17	+1.142	+45.295				9	-9.796	-22.275				10	+58.831	-40.316				10	-21.330	+33.854				
20	+1.420	+42.275				9	-7.553	-15.984				10	+58.831	-40.316				10	-21.330	+33.854				
9	+2.898	+2.052				9	-7.067	-3.891				10	+58.831	-40.316				10	-21.330	+33.854				
9	+4.050	+43.004				9	-5.568	-53.159				10	+58.831	-40.316				10	-21.330	+33.854				
9	+0.835	+61.398	65	96	9.4	9	-9.796	-22.275	66	63	9.4	10	+58.831	-40.316	66	84	9.1	9	-21.046	+25.664	65	125	8.8	
17	+1.142	+45.295				18	-23.819	-40.298				10	+58.831	-40.316				10	-21.330	+33.854				
20	+1.420	+42.275				10	-22.967	-23.103				10	+58.831	-40.316				10	-21.330	+33.854				
9	+2.898	+2.052				16	-21.477	-31.749				10	+58.831	-40.316				10	-21.330	+33.854				
9	+4.050	+43.004				18	-20.627	-0.537				10	+58.831	-40.316				10	-21.330	+33.854				
9	+0.835	+61.398	65	97	10.2	101	+55.902	-39.163	66	64	10.0	10	+58.831	-40.316	66	85	9.0	9	-21.046	+25.664	65	126	9.7	
17	+1.142	+45.295				26	-20.483	-0.316				10	+58.831	-40.316				10	-21.330	+33.854				
20	+1.420	+42.275				13																		

C.P.D.					C.P.D.					C.P.D.					C.P.D.						
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.		
	51.					111.					PLATE CENTRE. 1 ^h 30 ^m , - 66°. Plate 1614. 1896, Nov. 6. PROVISIONAL CONSTANTS. $a = - .01123$ $d = + .00063$ $b = - .00071$ $e = - .01112$ $c = + .1402$ $f = - .0077$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$										
9	-43°627	-8°708			9	+53°299	-38°616			52	51,	-17°030	+22°184	65	134	7°8					
9	-43°098	-39°415			10	+53°537	-37°287			9	-15°522	+62°001									
9	-40°331	-45°387	66	86	17	+53°730	-39°934	66	98	10	-15°324	+18°215									
10	-39°984	-37°998			9	+57°643	-14°424			10	-15°243	+26°568									
9	-38°780	-12°263			26	+58°199	-41°310	66	99	9	-14°945	+41°221									
10	-38°603	-0°134			11	+59°016	-2°640			9	-13°879	+50°905									
10	-38°266	-47°203			9	+59°419	-27°400			50	-13°211	+22°026	65	135	7°7						
9	-37°644	-28°234			9	+59°731	-12°596			9	-12°568	+38°572									
9	-37°630	-59°249			20	+63°196	-6°408	66	100	9	-11°538	+63°736									
10	-37°459	-32°319			11	+64°491	-37°628	66	101	19	-10°968	+53°077	65	136	9°4						
	61																				
9	-36°513	-0°389								15	-64°645	+54°012			9	-10°583	+40°764				
10	-34°490	-44°771								9	-63°863	+37°735			9	-9°572	+19°540				
9	-34°252	-33°032								9	-63°848	+29°877			10	-8°647	+41°702				
9	-33°171	-36°877								9	-63°299	+24°579			14	-7°039	+48°992				
13	-32°175	-53°758	67	76						9	-61°802	+5°099			11	-0°774	+21°616				
9	-31°511	-29°672								9	-61°195	+41°312			10	-5°888	+29°820				
9	-31°130	-3°826								15	-60°830	+0°647			10	-2°283	+0°417				
28	-30°731	-28°020	66	87						14	-60°210	+17°106			10	-2°182	+8°580				
9	-30°020	-46°477								15	-59°572	+34°261			9	-2°107	+61°328				
26	-29°137	-43°901	66	88						10	-58°659	+52°350			10	-0°526	+11°874				
	71																				
11	-27°753	-42°621								11	-57°783	+14°283			34	-0°157	+37°613	65	137	8°3	
9	-27°297	-39°983								9	-57°206	+14°022			9	+0°057	+21°783				
9	-21°963	-27°771								18	-57°133	+51°088			9	+0°290	+52°609				
9	-20°573	-18°271								15	-56°805	+16°871			10	+0°757	+15°229				
9	-18°853	-51°286								10	-55°246	+24°543			34	+0°859	+35°375				
9	-14°486	-14°312								10	-53°756	+60°233			13	+1°079	+38°351				
17	-12°163	-37°759	66	89						9	-53°054	+63°211			9	+2°087	+35°329				
9	-11°020	-2°315								9	-49°932	+22°526			10	+2°286	+33°975				
9	-9°706	-46°949								9	-47°696	+45°324			9	+4°924	+33°657				
9	-9°094	-20°813								9	-47°302	+22°682			9	+5°585	+47°701				
	81																				
10	-8°120	-32°153								16	-47°202	+47°562			9	+6°466	+51°622				
9	-4°882	-20°762								9	-46°897	+41°352			19	+6°824	+58°820	65	138	9°6	
9	-3°365	-35°264								14	-45°187	+13°090			11	+7°963	+9°185				
14	-0°434	-0°589	66	91						9	-43°838	+9°907			9	+8°446	+49°326				
9	+1°962	-41°425								13	-42°959	+12°464			10	+9°592	+55°777				
9	+2°255	-12°214								9	-41°216	+2°617			44	+10°034	+11°495	65	139	8°4	
10	+6°040	+48°161								22	-40°768	+54°220	65	132	9°6	10	+10°896	+2°154			
18	+8°483	-30°063	66	92						9	-40°276	+24°409			10	+10°916	+8°315				
58	+9°476	-56°220	67	81						13	-39°034	+14°902			9	+12°629	+43°483				
10	+11°281	-33°183								10	-38°678	+39°064			10	+13°065	+30°201				
	91																				
12	+16°380	-43°409								9	-37°857	+50°262			11	+13°248	+29°551				
9	+17°376	-30°756								12	-37°310	+36°681			14	+13°260	+15°258				
10	+17°716	-36°620								14	-32°276	+3°584			9	+13°596	+26°930				
9	+19°740	-44°541								9	-31°476	+43°748			26	+14°262	+7°387	66	104	9°2	
13	+23°761	-40°980								15	-30°379	+22°364			38	+15°377	+11°888	65	140	8°8	
19	+26°747	-44°762	66	93						9	-28°442	+5°610			9	+15°712	+22°193				
9	+27°649	-38°300								9	-27°020	+46°701			14	+17°086	+59°064				
10	+29°935	-26°489								11	-25°039	+31°906			10	+18°202	+62°199				
9	+31°485	-37°626								9	-25°003	+25°061			9	+18°292	+8°756				
9	+34°052	-42°548								16	-24°197	+49°892			9	+18°809	+15°156				
	101																				
20	+35°157	-38°530	66	94						10	-23°591	+61°156			9	+20°068	+28°937				
12	+37°398	-12°708								14	-21°426	+7°156			9	+20°707	+20°859				
9	+37°779	-45°330								12	-21°386	+28°582			32	+20°898	+29°482	65	141	8°7	
22	+38°081	-59°205	67	88						18	-20°162	+36°028	65	133	9°8	10	+22°631	+21°332			
46	+38°516	-55°525	67	89						9	-19°866	+40°700			9	+23°353	+22°653				
13	+40°892	-9°345	66	95						9	-18°604	+51°556			15	+23°467	+47°645				
15	+45°840	-1°184	66	96						14	-18°577	+25°511			9	+24°625	+43°134				
10	+46°415	-13°880								14	-18°542	+15°142			9	+26°440	+53°858				
14	+47°254	-43°030	66	97						9	-18°224	+53°083			11	+26°671	+0°907				
13	+50°872	-7°776								10	-17°842	+49°448			10	+29°686	+60°919				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
11	+30°148	+4°922			16	-51°976	-2°435			9	+10°913	-16°106			20	+55°243	-32°726	66° 109	8°8
9	+30°825	+8°023			11	-51°349	-11°772			9	+11°483	-50°737			15	+55°777	-1°391		
9	+33°880	+39°756			14	-50°965	-61°247			11	+13°366	-53°913			13	+56°187	-33°458		
19	+ 34°139	+ 45°262	65	142	9°2	11	-50°588	-12°324		12	+13°436	-15°252			13	+60°017	-19°173		
12	+ 34°482	+ 26°235			31	- 50°112	- 41°067	66	99	8°1	12	+13°680	-51°363		12	+61°650	-29°165		
9	+35°871	+14°729			13	-49°878	-27°086			13	+15°201	-55°037			10	+63°286	-8°746		
9	+37°905	+36°490			9	-48°288	-35°960			15	+16°379	-13°678			12	+63°652	-47°981		
9	+38°721	+37°160			12	-47°811	-36°443			13	+16°448	-62°363			11	+64°024	-26°558		
11	+39°190	+15°349			30	- 47°536	- 5°909	66	100	8°8	9	+17°549	-12°336						
9	+39°354	+43°787			13	-47°265	-32°199			9	+17°600	-42°800							
	121					181					241								
9	+40°726	+25°733			14	-47°103	-49°373			10	+20°544	-35°771							
11	+41°121	+60°533			10	-46°692	-5°227			11	+22°504	-51°308							
9	+41°264	+49°215			14	-44°517	-23°049			11	+23°769	-42°086							
32	+ 42°342	+ 55°392	65	143	8°4	14	-44°504	-14°346		9	+24°360	-48°991							
0	+42°712	+48°224			18	-44°125	-36°946	66	101	9°8	17	+24°369	-3°794						
10	+42°975	+17°227			14	-43°933	-24°931			9	+24°494	-64°704							
12	+45°826	+51°060			9	-43°434	-33°471			12	+25°505	-44°744							
15	+47°154	+3°793	66	107	9°2	9	-43°267	-31°489		9	+25°786	-15°077							
10	+48°390	+11°425			18	-41°251	-18°338			12	+26°072	-55°257							
9	+48°662	+37°168			9	-39°962	-40°325			32	+ 26°859	- 17°638	66	105	9°0				
	131					191					251								
12	+48°986	+62°557			13	-39°398	-45°921			13	+28°593	-52°103							
9	+49°598	+21°689			9	-39°326	-36°978			10	+29°182	-54°449							
24	+50°378	+27°332	65	144	9°8	10	-38°016	-32°577		28	+29°887	-64°944	67	107	8°6				
9	+50°662	+11°334			16	-32°848	-2°069			11	+30°031	-47°397							
9	+50°916	+12°391			11	-32°220	-34°106			12	+30°048	-41°225							
9	+51°718	+18°122			11	-30°718	-3°938			9	+30°200	-64°982							
16	+52°730	+49°690			11	-30°013	-62°253			20	+30°559	-48°865							
9	+53°512	+38°124			19	- 28°654	- 27°744			17	+31°106	-31°473							
9	+54°517	+31°115			12	-28°546	-49°967			11	+31°552	-17°544							
10	+56°780	+47°289			19	-28°223	-0°157	66	102	9°8	14	+31°800	-18°071						
	141					201					261								
9	+57°646	+0°641			9	-27°034	-45°610			12	+32°482	-36°889							
9	+58°068	+3°231			11	-26°600	-43°595			11	+32°769	-40°576							
9	+58°950	+60°185			15	-24°336	-10°971			10	+33°042	-23°151							
9	+60°960	+4°429			12	-23°575	-34°695			41	+ 33°595	- 7°297	66	106	7°6				
9	+61°255	+37°163			11	-20°360	-19°349			11	+34°372	-56°838							
9	+61°597	+38°346			12	-19°720	-32°712			9	+34°462	-18°874							
9	+62°079	+49°541			12	-16°724	-42°761			10	+34°965	-1°121							
30	+62°113	+34°402	65	145	8°9	9	-14°313	-9°202		11	+36°221	-10°468							
9	+63°006	+42°434			11	-14°272	-43°794			12	+36°878	-13°183							
9	+63°665	+43°718			40	-12°699	-61°446	67	95	7°6	9	+39°957	-42°064						
	151					211					271								
9	+64°041	+7°366			9	-12°481	-2°348			9	+40°097	-12°586							
9	-64°513	-5°379			10	-11°687	-61°486			9	+40°433	-19°108							
9	-64°192	-11°600			19	-11°493	-55°070	67	96	9°8	10	+40°463	-15°098						
9	-63°793	-47°686			11	-11°058	-47°660			11	+42°105	-23°578							
17	-63°772	-14°519			37	- 10°777	- 19°392	66	103	8°8	12	+42°267	-29°211						
18	-60°888	-43°535	66	97	9°6	13	-7°769	-59°280		10	+44°273	-28°634							
9	-59°857	-62°948			12	-7°210	-61°034			10	+45°320	-57°030							
16	-59°748	-8°111			9	-7°192	-28°774			9	+46°578	-43°668							
9	-59°656	-44°225			12	-6°830	-31°517			9	+46°866	-23°986							
11	-58°459	-4°131			15	-6°185	-63°565			11	+46°900	-38°143							
	161					221					281								
9	-57°780	-31°175			11	-4°920	-59°802			12	+47°138	-32°014							
10	-57°586	-60°817			11	-4°630	-4°669			9	+47°746	-1°941							
11	-57°397	-51°156			11	-2°690	-21°433			11	+48°101	-45°972							
10	-55°904	-47°894			13	-1°729	-14°244			9	+48°106	-15°450							
12	-55°204	-38°722			13	+0°788	-47°134			11	+48°806	-24°119							
13	-55°057	-37°384			12	+2°749	-50°833			30	+ 51°973	- 21°258	66	108	9°2				
20	-54°688	-40°009	66	98	9°2	9	+4°089	-24°044		9	+53°938	-53°749							
12	-54°061	-59°657				9	+4°510	-63°720		15	+54°125	-42°619							
13	-52°520	-14°282				9	+6°694	-55°281		11	+54°458	-51°054							
9	-52°024	-20°220				10	+9°398	-12°996		12	+55°157	-52°647							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE.					51,					111,					171,				
1h 48m, - 66°.																			
Plate 1755. 1897, Nov. 25.																			
PROVISIONAL CONSTANTS.																			
$a = -0.01098 \quad d = -0.00071$																			
$b = +0.00094 \quad e = -0.01131$																			
$c = +0.0378 \quad f = +0.0505$																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
19	-64°127	+3°100	66° 107	9°2	9	-14°849	+22°234	65° 150	9°2	11	+43°635	+64°517	66° 123	7°4	19	-37°875	-58°102	67° 117	9°3
9	-64°024	+31°795			13	-14°170	+24°125			54	+44°347	+4°745			9	-37°366	-37°419		
12	-63°448	+14°813			20	-13°693	+51°245			12	+46°203	+38°340			9	-35°878	-30°964		
11	-62°997	+21°163			11	-11°967	+39°670			12	+46°506	+3°345			11	-35°743	-22°132		
22	-62°630	+26°831	65° 144	9°8	9	-11°459	+22°874			11	+46°730	+14°942			14	-35°278	-2°008		
					13	-11°431	+35°618			11	+46°785	+53°786			11	-34°574	-17°647		
20	-61°922	+49°300			20	-9°651	+57°756	65° 151	9°2	14	+46°934	+16°885			14	-34°371	-33°553		
10	-61°012	+11°964			12	-9°543	+64°192			13	+49°137	+44°349			19	-34°208	-36°725		
9	-60°628	+17°747			14	-7°427	+53°219			18	+49°461	+49°463	65° 157	9°2	9	-33°305	-26°522		
12	-60°293	+37°817			9	-6°207	+60°368			12	+49°590	+31°355			12	-32°698	-21°911		
11	-58°784	+30°897			61					121					181				
	11				11	-6°034	+36°420			12	+50°254	+43°088			10	-28°910	-53°731		
13	-57°702	+47°205			14	-5°932	+10°356			11	+50°451	+10°287			9	-28°165	-25°154		
11	-56°509	+60°220			9	-5°638	+6°790			14	+51°570	+17°694			18	-27°120	-19°533	66° 112	9°2
9	-53°440	+0°736			11	-5°603	+59°638			13	+52°058	+23°321			10	-26°263	-30°743		
11	-53°208	+3°347			9	-4°355	+2°728			11	+54°201	+11°663			9	-25°293	-9°757		
10	-52°592	+49°810			10	-3°959	+32°568			52	+54°852	+2°981	66° 124	7°4	24	-24°890	-10°142	66° 113	9°2
					11	-3°534	+13°998			14	+54°875	+12°793			9	-23°852	-3°710		
					12	-3°467	+40°654			9	+56°134	+51°612			11	-23°446	-45°056		
					11	-1°429	+1°364			24	+56°921	+43°143	65° 158	8°9	28	-22°392	-62°647	67° 118	8°7
					13	+0°771	+16°293			11	+57°502	+4°207			9	-21°873	-8°439		
					71					131					191				
					19	+0°870	+61°201			12	+60°237	+36°557			9	-21°710	-10°086		
					9	+1°605	+43°794			12	+60°502	+61°748			14	-21°396	-54°867		
					11	+1°876	+31°745			12	+62°554	+60°881			15	-20°082	-60°457		
					19	+2°833	+15°953	65° 153	9°3	11	+62°573	+28°299			9	-19°896	-64°316		
					22	+5°749	+24°702	65° 154	9°2	11	+62°595	+11°026			9	-19°110	-36°154		
					11	+8°853	+44°906			12	+62°743	+11°519			20	-18°977	-18°821	66° 114	9°2
					11	+9°559	+21°859			11	+63°673	+24°975			17	-16°888	-3°243		
					10	+10°939	+62°743			9	+63°685	+43°022			10	-16°609	-26°758		
					12	+11°167	+60°543			9	+63°979	+3°225			13	-16°268	-15°137		
					9	+12°203	+62°767			9	+64°204	+30°786			13	-15°826	-38°303		
					81					141					201				
					9	+12°563	+49°577			36	+64°682	+23°462	65° 160	8°5	9	-15°278	-35°181		
					24	+13°562	+37°710	65° 155	9°0	10	-64°627	-29°441			20	-15°093	-46°480	66° 115	9°2
					13	+14°052	+30°227			10	-63°115	-2°561			12	-13°406	-22°146		
					11	+16°968	+34°716			10	-61°775	-16°002			40	-13°175	-16°256	66° 116	8°4
					22	+18°540	+55°965	65° 156	9°2	14	-61°529	-32°594			15	-12°255	-28°562		
					9	+18°540	+59°376			10	-61°502	-57°692			13	-11°702	-29°477		
					17	+19°204	+58°325			11	-61°310	-38°734			19	-8°695	-55°779	67° 120	9°2
					20	+20°575	+56°173			9	-61°286	-57°031			12	-8°372	-62°584		
					13	+21°029	+42°986			10	-61°232	-44°270			14	-6°106	-9°960		
					11	+21°985	+41°236			10	-60°438	-24°599			9	-4°422	-5°219		
					91					151					211				
					13	+24°971	+45°885			11	-59°550	-46°450			9	-3°976	-42°444		
					11	+26°353	+23°657			23	-57°481	-21°513	66° 108	9°2	9	-3°054	-1°164		
					11	+27°019	+45°946			10	-56°098	-4°284			13	+0°502	-57°681		
					9	+27°464	+57°098			16	-55°138	-1°429			10	+0°818	-46°807		
					13	+28°189	+2°581			21	-53°778	-42°666			9	+1°344	-51°131		
					10	+28°255	+43°541			28	-53°384	-32°719	66° 109	8°8	12	+2°374	-53°520		
					12	+29°466	+5°025			9	-53°166	-53°762			18	+2°882	-59°250		
					14	+29°957	+20°099			12	-52°838	-51°048			13	+3°470	-39°443		
					9	+30°053	+36°884			17	-52°392	-33°373			13	+3°549	-64°060		
					12	+31°291	+60°145			14	-52°014	-52°586			12	+4°007	-50°520		
					101					161					221				
					11	+31°851	+30°277			13	-49°613	-18°852			10	+4°627	-5°204		
					11	+33°983	+42°956			11	-47°259	-28°698			9	+7°867	-4°414		
					9	+37°989	+36°316			9	-47°142	-55°611			15	+7°895	-36°439		
					11	+38°182	+3°424			10	-47°116	-8°215			9	+8°822	-52°213		
					10	+39°362	+18°909			10	-45°076	-25°922			9	+8°865	-37°055		
					10	+39°786	+33°372			12	-44°188	-13°887			13	+10°296	-35°958		
					11	+41°345	+31°681			14	-43°899	-47°310			11	+10°646	-46°853		
					14	+42°471	+24°961			11	-43°436	-10°494			11	+12°154	-44°435		
					10	+42°559	+47°198			25	-41°406	-13°034	66° 110	9°0	11	+12°854	-13°918		
					14	+43°362	+29°566			10	-38°490	-16°696			12	+12°889	-63°173		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.
	231,					291,					PLATE CENTRE.			51,
9	+13°328	-54°947			34	+63°564	-51°809	66° 126	8°5		2 ^h 6 ^m , - 66°.		9	+0°315 +59°506
9	+14°549	-21°630			12	+64°310	-16°409				Plate 3144. 1909, Nov. 3.		9	+1°153 +23°887
11	+15°095	-31°271			20	+64°483	-40°927				PROVISIONAL CONSTANTS.		14	+1°883 +63°275
31	+15°198	-43°075	66	117	9°0						a = -°01166	d = +°00016	14	+3°646 +28°033
12	+18°431	-58°015									b = -°00001	e = -°01166	10	+5°621 +49°723
9	+19°863	-56°942									c = +°0634	f = -°1064	9	+5°634 +25°909
17	+21°453	-59°824									To obtain standard co-ordinates, ξ, η		10	+5°715 +21°239
9	+21°931	-43°632									$\xi = x + ax + by + c$		15	+8°916 +63°777
12	+22°411	-37°028									$\eta = y + dx + ey + f$		9	+9°200 +57°893
29	+23°374	-29°311	66	118	9°2								9	+10°361 +62°517
	241													61
13	+23°678	-16°682									9	-63°805 +30°993	9	+10°958 +11°626
18	+24°028	-37°090									11	-60°838 +17°487	9	+11°509 +59°584
9	+24°279	-38°357									12	-60°745 +23°137	9	+13°783 +51°141
11	+24°420	-27°847									9	-57°787 +11°648	10	+15°522 +18°440
14	+24°549	-2°028									19	-57°282 +43°270	9	+17°929 +50°918
10	+25°044	-46°177									12	-57°207 +12°826	9	+18°127 +51°659
9	+25°538	-23°752									40	-56°519 +3°064	11	+18°289 +22°647
9	+28°455	-9°257									9	-53°532 +36°929	9	+18°830 +34°102
36	+28°578	-11°197	66	119	8°4						9	-52°941 +61°355	9	+19°163 +3°053
15	+29°742	-51°353									9	-49°379 +11°630	9	+19°854 +58°160
	251											11		71
9	+31°655	-26°204									9	-49°304 +25°572	12	+20°271 +62°363
10	+33°009	-25°147									10	-49°260 +12°136	16	+20°663 +30°555
14	+33°306	-8°210									26	-48°155 +24°162	9	+20°885 +21°196
22	+36°085	-9°954	66	120	9°2						24	-45°919 +19°241	12	+21°345 +46°922
10	+36°731	-15°310									26	-45°056 +35°411	12	+22°725 +50°462
12	+39°909	-47°077									9	-43°824 +43°992	18	+24°560 +31°888
20	+40°286	-43°618									15	-43°717 +32°703	10	+25°760 +7°901
14	+41°437	-59°332									9	-42°747 +36°684	9	+26°106 +27°621
30	+41°577	-31°014	66	121	8°7						10	-42°576 +0°741	9	+27°868 +42°169
9	+41°600	-11°666									22	-42°282 +6°935	12	+28°507 +16°090
	261											21		81
12	+41°892	-51°710									16	-41°644 +31°321	11	+29°049 +38°152
11	+42°252	-31°412									12	-39°447 +10°570	17	+29°473 +8°303
28	+42°844	-19°417	66	122	9°1						9	-36°524 +40°667	9	+30°635 +19°079
10	+42°923	-59°150									15	-35°087 +21°611	17	+30°860 +0°269
17	+43°251	-14°798									10	-34°233 +60°258	10	+31°659 +43°320
14	+44°272	-62°659									9	-33°740 +12°048	17	+31°988 +6°475
11	+44°854	-51°729									20	-32°303 +0°168	10	+33°637 +3°406
10	+45°498	-56°717									9	-29°798 +21°227	9	+35°122 +0°706
10	+45°554	-4°609									11	-27°113 +42°864	11	+38°180 +11°318
9	+45°726	-62°491									9	-26°266 +19°379	10	+40°954 +14°254
	271											31		91
16	+45°888	-26°501									9	-25°768 +42°108	9	+41°082 +16°443
9	+46°294	-64°736									36	-25°568 +23°116	11	+41°790 +64°229
12	+46°366	-62°621									19	-22°514 +24°156	11	+42°378 +40°115
12	+47°182	-35°877									16	-21°460 +30°192	15	+43°050 +2°189
9	+47°366	-57°937									10	-18°077 +29°260	9	+45°919 +16°963
9	+48°486	-38°899									10	-17°435 +27°778	9	+48°610 +6°773
16	+48°501	-7°972									10	-15°224 +37°567	9	+48°712 +49°247
9	+49°872	-41°494									14	-14°919 +34°441	10	+50°280 +21°511
18	+50°107	-58°759									9	-11°044 +38°791	15	+51°986 +1°271
9	+51°033	-36°887									14	-9°089 +53°861	10	+52°879 +31°018
	281											41		101
10	+51°385	-35°693									9	-7°255 +28°865	9	+58°731 +14°557
18	+51°504	-51°683									12	-7°104 +8°342	9	+59°712 +25°885
10	+54°451	-47°417									9	-6°140 +6°306	9	+59°868 +38°986
9	+54°473	-39°335									11	-5°066 +17°073	10	+63°996 +10°859
51	+54°682	-34°448	66	125	7°4						9	-4°523 +46°318	10	-63°381 -27°009
19	+54°935	-36°197									10	-3°650 +23°250	9	-63°078 -31°377
11	+55°695	-5°016									20	-2°983 +32°392	11	-62°080 -8°332
9	+59°747	-0°625									9	-1°532 +21°815	9	-56°871 -58°878
9	+62°808	-26°632									14	-0°918 +27°229	11	-55°956 -51°745
11	+63°101	-51°873									16	-0°836 +13°352	32	-54°046 -34°301

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.		
	111,					171,					51,					
I4	-53°671	-36°054			I6	+21°610	-31°485				I2	+43°853	+0°502			
9	-49°524	-18°260			22	+21°998	-14°740	66	133	8°5	I2	+43°895	+13°191			
II	+45°728	-15°638			IO	+22°693	-10°214				9	+44°502	+6°404			
I2	-45°226	-7°426			II	+23°073	-58°048				IO	+46°585	+6°642			
IQ	-45°198	-12°034			9	+24°682	-62°846				15	+50°150	+64°338	65 186 8°7		
9	-44°439	-51°105			9	+24°758	-32°485				I3	+50°825	+54°064	65 187 9°3		
26	-43°967	-51°013	66	126	8°5	I5	+24°890	-16°175			IO	+55°857	+48°372	65 188 9°5		
I5	-43°816	-40°093			II	+25°014	-18°036				I2	+56°643	+27°447	65 189 9°5		
I4	+43°062	-25°186			II	+25°225	-24°027				9	+59°211	+27°165			
II	+41°844	-25°944			IO	+25°236	-15°179				II	-58°595	-37°811			
	121					181						61				
IO	-35°885	-17°078			I7	+25°721	-19°217			9	-62°434	+20°800	9	-57°014	-28°779	
I8	-35°818	-22°462	66	127	8°4	30	+26°131	-37°913	66	134	7°9	IO	-52°513	-6°228		
I2	-35°144	-49°035			I2	+27°022	-63°172			I2	-59°252	+0°762	9	-51°051	-23°895	
I2	-34°415	-44°441			IO	+28°192	-28°212			9	-54°197	+38°948	I2	-51°217	-41°489	
I4	-33°884	-12°334			IO	+28°433	-57°127			9	-53°370	+25°867	I3	-48°624	-26°237	
I4	-31°915	-32°895			IO	+31°203	-52°534			II	-49°202	+56°770	I2	-46°419	-0°167	
9	-30°844	-14°033			9	+31°379	-54°219			IO	-47°991	+11°188	9	-44°744	-31°003	
9	-30°680	-45°081			II	+31°496	-19°254			I2	-46°970	+20°065	9	-40°914	-21°256	
9	-30°232	-30°337			IO	+33°141	-49°743			9	-46°715	+22°074	15	-37°882	-63°531	
I3	-27°825	-1°278			I7	+33°499	-54°957	67	143	9°2	IO	-44°339	+22°943	9	-37°229	-26°555
	131					191						71				
II	-27°464	-14°744			II	+35°207	-11°416			9	-43°245	+10°586	15	-36°240	-51°241	
9	-23°097	-0°250			IO	+37°630	-24°099			9	-41°282	+2°463	IO	-35°750	-17°958	
I2	-22°742	-61°316			9	+40°089	-22°881			22	-38°293	+62°457	IO	-35°393	-26°111	
II	-22°737	-36°712			II	+41°004	-61°332			I2	-37°803	+31°979	IO	-34°495	-0°024	
II	-21°815	-24°206			I2	+43°755	-14°092			9	-32°257	+8°213	II	-34°460	-0°100	
IO	-20°498	-36°949			IO	+44°206	-45°386			9	-31°280	+5°894	I2	-33°186	-22°199	
9	-18°078	-39°339			IO	+47°909	-2°244			IO	-24°146	+50°130	I3	-27°012	-22°639	
20	-17°380	-37°283	66	129	8°7	I3	+49°818	-37°230		I3	-23°929	+25°783	66	-27°012	-22°639	
I2	-16°658	-25°879			IO	+50°836	-25°818			I2	-23°076	+5°158	IO	-23°433	-2°791	
II	-16°317	-27°357			II	+52°040	-28°349			I2	-23°076	+5°158	23	-22°831	-40°600	
	141					201				9	-17°234	+10°610	66	-22°714	-26°329	
I2	-16°182	-6°686			I4	+56°904	-41°469			9	-17°234	+10°610	66	-22°714	-26°329	
IO	-16°149	-27°123			IO	+57°759	-23°876			21			66	-22°714	-26°329	
I2	-14°085	-2°659			IO	+58°171	-6°188			22	-14°803	+12°701	66	-22°714	-26°329	
II	-12°135	-46°629			9	+58°967	-2°801			I8	-12°597	+38°976	66	-22°714	-26°329	
II	-11°439	-58°164			IO	+60°174	-1°798			9	-11°737	+28°592	66	-22°714	-26°329	
										9	-11°693	+35°120	66	-22°714	-26°329	
										9	-11°195	+24°127	66	-22°714	-26°329	
40	-9°242	-25°454	66	130	7°3	I2	+60°604	-26°446		II	-9°632	+64°681	66	-22°714	-26°329	
IO	-8°081	-35°761			II	+64°703	-0°615			9	-9°484	+60°144	66	-22°714	-26°329	
II	-3°621	-1°170								I2	-6°259	+47°597	66	-22°714	-26°329	
IO	-2°739	-54°999								IO	-6°066	+40°922	66	-22°714	-26°329	
I3	-1°313	-15°257								9	-2°234	+45°189	66	-22°714	-26°329	
	151															
II	-0°309	-27°292								31						
I4	+1°296	-46°738								9	-1°357	+14°415				
I7	+1°871	-52°182	66	131	9°2					9	+2°040	+9°246				
I2	+4°210	-47°618								IO	+5°868	+5°331				
9	+4°716	-36°855								I8	+8°930	+47°020				
										I8	+10°596	+13°901				
9	+4°961	-45°245								I3	+11°791	+60°182				
II	+5°017	-2°803								I3	+17°603	+52°403				
I3	+5°425	-28°178								I4	+19°549	+26°366				
IO	+6°094	-44°679								IO	+21°297	+46°773				
I4	+7°923	-29°638								9	+21°627	+59°604				
	161															
IO	+8°243	-25°284								41						
9	+10°095	-27°370								9	+22°925	+27°334				
9	+11°193	-55°504								9	+23°241	+59°609				
IO	+15°809	-30°964								9	+26°385	+16°918				
I6	+16°448	-8°709								II	+27°761	+33°383				
										9	+29°256	+25°325				
I2	+17°861	-39°686								9	+29°417	+15°669				
I7	+18°162	-49°956	66	132	9°2					9	+29°849	+34°163				
I6	+19°079	-57°023	67	141	9°3					IO	+29°873	+27°784				
9	+20°496	-16°096								9	+30°425	+12°059				
I3	+20°666	-61°881								I5	+34°718	+39°137	65	185	9°1	

9471.—12

3h 0m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
PLATE CENTRE. 3h 0m, - 66°. Plate 1456. 1895, Dec. 12. PROVISIONAL CONSTANTS. a = +0.01137 d = +0.00018 b = +0.00012 e = -0.01142 c = +0.0223 f = -0.0169 To obtain standard co-ordinates ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51, 10 + 1°164 + 56°459 9 + 3°081 + 6°003 10 + 4°124 + 37°847 16 + 5°542 + 22°585 9 + 8°534 + 25°372 9 + 10°705 + 57°161 9 + 11°340 + 9°683 10 + 12°378 + 7°343 28 + 12°526 + 4°936 28 + 12°803 + 47°801 61 26 + 16°224 + 27°158 9 + 16°513 + 47°829 10 + 16°941 + 11°107 9 + 18°375 + 43°209 19 + 18°820 + 61°768 17 + 19°853 + 34°564 38 + 20°216 + 25°823 10 + 21°739 + 41°067 9 + 22°411 + 64°168 9 + 23°235 + 5°469 71 9 + 27°847 + 17°210 9 + 27°873 + 23°223 9 + 28°874 + 34°566 17 + 29°029 + 15°305 19 + 29°270 + 32°698 9 + 31°288 + 55°714 17 + 32°389 + 49°470 14 + 32°588 + 53°417 9 + 32°876 + 27°281 9 + 32°937 + 11°355 81 9 + 33°956 + 61°013 22 + 34°218 + 9°846 12 + 34°391 + 17°837 9 + 35°918 + 52°038 11 + 35°947 + 43°013 9 + 37°751 + 13°129 9 + 40°830 + 11°030 9 + 41°177 + 31°154 11 + 41°340 + 28°831 9 + 42°651 + 46°752 91 10 + 43°664 + 35°158 9 + 45°109 + 7°729 44 + 45°966 + 63°237 9 + 46°113 + 37°848 9 + 46°440 + 6°942 9 + 46°682 + 31°931 17 + 48°461 + 37°621 9 + 48°464 + 31°578 9 + 48°722 + 31°340 32 + 49°483 + 45°810 101 10 + 50°188 + 24°643 11 + 51°407 + 35°222 10 + 53°689 + 4°609 9 + 55°898 + 1°554 18 + 56°839 + 24°371 12 + 56°974 + 31°660 27 + 57°401 + 38°934 10 + 57°644 + 47°141 9 + 59°308 + 21°181 9 + 59°970 + 53°437	111, 9 + 60°107 + 30°488 12 + 60°119 + 12°093 17 + 61°116 + 19°758 9 + 62°063 + 6°414 11 + 63°820 + 61°600 12 + 64°588 + 56°563 15 + 64°859 + 54°625 9 + 64°904 + 29°473 9 + 63°943 + 32°287 9 + 62°351 + 24°153 121 10 + 62°297 + 32°813 12 + 61°631 + 27°156 9 + 60°396 + 58°186 13 + 59°227 + 22°175 14 + 59°164 + 24°784 9 + 59°036 + 31°715 11 + 58°703 + 3°258 12 + 56°866 + 60°487 12 + 55°084 + 31°678 9 + 54°709 + 55°372 131 10 + 53°249 + 39°356 9 + 52°748 + 39°788 9 + 51°943 + 37°798 11 + 51°921 + 25°092 11 + 50°551 + 12°042 9 + 49°453 + 15°820 11 + 49°365 + 51°934 14 + 46°704 + 16°754 9 + 45°972 + 16°695 11 + 44°687 + 36°622 141 9 + 44°273 + 21°977 20 + 44°033 + 45°897 9 + 43°746 + 45°711 9 + 42°633 + 5°647 9 + 41°774 + 56°208 10 + 41°171 + 1°719 18 + 40°483 + 37°301 10 + 39°770 + 19°028 9 + 38°262 + 39°677 18 + 37°788 + 45°473 151 9 + 37°172 + 52°524 10 + 33°953 + 37°364 11 + 32°944 + 54°201 9 + 32°890 + 34°004 9 + 32°456 + 40°014 11 + 32°222 + 7°072 12 + 31°757 + 36°139 9 + 28°848 + 16°833 16 + 28°731 + 32°691 9 + 26°019 + 27°710 161 15 + 24°255 + 42°412 12 + 23°269 + 55°350 9 + 21°240 + 27°608 9 + 19°664 + 38°935 9 + 19°403 + 47°604 19 + 19°399 + 29°142 9 + 19°177 + 47°418 9 + 14°882 + 45°589 14 + 14°166 + 24°928 9 + 13°976 + 19°047	171, 10 + 13°897 + 48°984 11 + 13°777 + 36°045 9 + 12°649 + 4°030 12 + 11°327 + 61°311 12 + 10°978 + 7°862 9 + 10°343 + 5°426 14 + 9°993 + 57°802 9 + 9°697 + 36°951 9 + 8°650 + 12°536 11 + 8°087 + 50°279 181 9 + 8°041 + 24°012 9 + 7°354 + 34°941 9 + 6°697 + 36°993 11 + 6°667 + 63°585 9 + 6°464 + 52°987 12 + 6°429 + 13°376 12 + 6°388 + 24°005 9 + 4°337 + 7°508 16 + 3°748 + 60°922 9 + 2°100 + 24°399 191 10 + 1°907 + 7°191 9 + 0°778 + 36°809 12 + 3°418 + 56°730 12 + 4°696 + 24°755 14 + 6°547 + 3°500 11 + 8°468 + 32°617 20 + 10°040 + 49°081 9 + 10°651 + 48°785 9 + 11°392 + 3°083 9 + 14°534 + 41°533 201 11 + 15°017 + 46°337 9 + 15°382 + 4°671 10 + 16°757 + 36°472 16 + 16°988 + 22°359 9 + 17°785 + 57°105 13 + 18°265 + 22°595 12 + 20°009 + 40°958 13 + 20°400 + 32°235 14 + 24°382 + 32°728 10 + 26°903 + 18°640 211 9 + 28°264 + 60°574 16 + 28°796 + 60°096 9 + 30°626 + 64°225 12 + 30°939 + 47°027 9 + 31°395 + 4°296 9 + 31°458 + 24°099 9 + 33°591 + 45°359 11 + 34°756 + 46°553 16 + 35°493 + 21°925 9 + 37°649 + 16°484 221 12 + 38°165 + 11°240 30 + 38°325 + 18°774 12 + 38°636 + 22°135 16 + 40°758 + 39°873 9 + 41°620 + 7°639 9 + 42°326 + 40°470 17 + 43°575 + 5°894 9 + 46°584 + 20°585 16 + 48°223 + 4°439 12 + 49°161 + 45°814																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
9	-64°399	+32°792	65	200	9°5	9	-63°211	+20°925	65	201	7°6	9	-54°365	+57°113	65	202	9°4	9	-54°179	+48°362	65	203	7°3	9	-49°067	+16°291	65	204	9°5	9	-48°444	+30°145	65	205	9°3	9	-44°916	+50°763	65	206	8°9	9	-44°683	+33°578	65	207	8°9	9	-43°658	+0°592	65	208	8°9	9	-41°730	+20°881	65	209	8°9	9	-41°259	+6°851	65	210	8°7	9	-39°736	+40°144	65	211	8°7	9	-38°003	+55°219	65	212	8°9	9	-36°009	+14°300	65	213	9°0	9	-35°685	+9°619	65	214	9°6	9	-34°507	+25°708	65	215	7°9	9	-33°847	+36°280	65	216	9°1	9	-32°213	+28°146	65	217	9°6	9	-32°176	+12°586	65	218	8°9	9	-30°742	+50°929	65	219	6°7	9	-29°502	+58°563	65	220	9°6	9	-28°692	+35°191	65	221	7°7	9	-28°277	+33°319	65	222	9°6	9	-26°588	+60°652	65	223	8°3	9	-26°548	+29°964	65	224	8°9	9	-26°125	+40°762	65	225	9°6	9	-25°523	+23°404	65	226	8°7	9	-25°446	+42°216	65	227	8°9	9	-24°114	+6°780	65	228	8°9	9	-23°783	+46°265	65	229	8°9	9	-23°474	+48°857	65	230	8°9	9	-19°129	+10°464	65	231	8°9	9	-17°659	+23°176	65	232	8°9	9	-15°643	+1°183	65	233	8°9	9	-12°268	+30°197	65	234	8°9	9	-12°028	+54°031	65	235	8°9	9	-9°928	+32°549	65	236	8°9	9	-9°383	+2°752	65	237	8°9	9	-8°697	+62°048	65	238	8°9	9	-6°231	+47°596	65	239	8°9	9	-5°294	+30°585	65	240	8°9	9	-1°237	+11°226	65	241	8°9	9	-0°898	+34°297	65	242	8°9	9	-0°897	+34°297	65	243	8°9	9	-0°897	+34°297	65	244	8°9	9	-0°897	+34°297	65	245	8°9	9	-0°897	+34°297	65	246	8°9	9	-0°897	+34°297	65	247	8°9	9	-0°897	+34°297	65	248	8°9	9	-0°897	+34°297	65	249	8°9	9	-0°897	+34°297	65	250	8°9	9	-0°897	+34°297	65	251	8°9	9	-0°897	+34°297	65	252	8°9	9	-0°897	+34°297	65	253	8°9	9	-0°897	+34°297	65	254	8°9	9	-0°897	+34°297	65	255	8°9	9	-0°897	+34°297	65	256	8°9	9	-0°897	+34°297	65	257	8°9	9	-0°897	+34°297	65	258	8°9	9	-0°897	+34°297	65	259	8°9	9	-0°897	+34°297	65	260	8°9	9	-0°897	+34°297	65	261	8°9	9	-0°897	+34°297	65	262	8°9	9	-0°897	+34°297	65	263	8°9	9	-0°897	+34°297	65	264	8°9	9	-0°897	+34°297	65	265	8°9	9	-0°897	+34°297	65	266	8°9	9	-0°897	+34°297	65	267	8°9	9	-0°897	+34°297	65	268	8°9	9	-0°897	+34°297	65	269	8°9	9	-0°897	+34°297	65	270	8°9	9	-0°897	+34°297	65	271	8°9	9	-0°897	+34°297	65	272	8°9	9	-0°897	+34°297	65	273	8°9	9	-0°897	+34°297	65	274	8°9	9	-0°897	+34°297	65	275	8°9	9	-0°897	+34°297	65	276	8°9	9	-0°897	+34°297	65	277	8°9	9	-0°897	+34°297	65	278	8°9	9	-0°897	+34°297	65	279	8°9	9	-0°897	+34°297	65	280	8°9	9	-0°897	+34°297	65	281	8°9	9	-0°897	+34°297	65	282	8°9	9	-0°897	+34°297	65	283	8°9	9	-0°897	+34°297	65	284	8°9	9	-0°897	+34°297	65	285	8°9	9	-0°897	+34°297	65	286	8°9	9	-0°897	+34°297	65	287	8°9	9	-0°897	+34°297	65	288	8°9	9	-0°897	+34°297	65	289	8°9	9	-0°897	+34°297	65	290	8°9	9	-0°897	+34°297	65	291	8°9	9	-0°897	+34°297	65	292	8°9	9	-0°897	+34°297	65	293	8°9	9	-0°897	+34°297	65	294	8°9	9	-0°897	+34°297	65	295	8°9	9	-0°897	+34°297	65	296	8°9	9	-0°897	+34°297	65	297	8°9	9	-0°897	+34°297	65	298	8°9	9	-0°897	+34°297	65	299	8°9	9	-0°897	+34°297	65	300	8°9	9	-0°897	+34°297	65	301	8°9	9	-0°897	+34°297	65	302	8°9	9	-0°897	+34°297	65	303	8°9	9	-0°897	+34°297	65	304	8°9	9	-0°897	+34°297	65	305	8°9	9	-0°897	+34°297	65	306	8°9	9	-0°897	+34°297	65	307	8°9	9	-0°897	+34°297	65	308	8°9	9	-0°897	+34°297	65	309	8°9	9	-0°897	+34°297	65	310	8°9	9	-0°897	+34°297	65	311	8°9	9	-0°897	+34°297	65	312	8°9	9	-0°897	+34°297	65	313	8°9	9	-0°897	+34°297	65	314	8°9	9	-0°897	+34°297	65	315	8°9	9	-0°897	+34°297	65	316	8°9	9	-0°897	+34°297	65	317	8°9	9	-0°897	+34°297	65	318	8°9	9	-0°897	+34°297	65	319	8°9	9	-0°897	+34°297	65	320	8°9	9	-0°897	+34°297	65	321	8°9	9	-0°897	+34°297	65	322	8°9	9	-0°897	+34°297	65	323	8°9	9	-0°897	+34°297	65	324	8°9	9	-0°897	+34°297	65	325	8°9	9	-0°897	+34°297	65	326	8°9	9	-0°897	+34°297	65	327	8°9	9	-0°897	+34°297	65	328	8°9	9	-0°897	+34°297	65	329	8°9	9	-0°897	+34°297	65	330	8°9	9	-0°897	+34°297	65	331	8°9	9	-0°897	+34°297	65	332	8°9	9	-0°897	+34°297	65	333	8°9	9	-0°897	+34°297	65	334	8°9	9	-0°897	+34°297	65	335	8°9	9	-0°897	+34°297	65	336	8°9	9	-0°897	+34°297	65	337	8°9	9	-0°897	+34°297	65	338	8°9	9	-0°897	+34°297	65	339	8°9	9	-0°897	+34°297	65	340	8°9	9	-0°897	+34°297	65	341	8°9	9	-0°897	+34°297	65	342	8°9	9	-0°897	+

3^h 18^m. - 66°

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C.P.D.					C.P.D.					C.P.D.					C.P.D.									
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.					
PLATE CENTRE.																								
3h 36m, - 66°.																								
Plate 1465. 1895, Dec. 16.																								
PROVISIONAL CONSTANTS.																								
a = - .01146 d = + .00043																								
b = - .00040 e = - .01122																								
c = - .0506 f = - .0566																								
To obtain standard co-ordinates, ξ, η																								
$\xi = x + ax + by + c$																								
$\eta = y + dx + ey + f$																								
12	-64°8'19	+31°6'97	65	240	9°6	9	-2°273	+9°247		111	-40°233	-15°778			171	+34°6'10	-30°9'09	66	204	9°4				
9	-64°478	+23°4'66				11	+0°841	+43°3'07		10	-38°743	-1°519			10	+35°0'67	-17°1'06	66	205	10°1				
14	-64°176	+59°8'08	65	241	8°7	11	+0°955	+61°3'65	65	254	9°7	43	-36°795	-50°6'42	66	195	5°8	11	+35°0'77	-18°6'97	66	206	9°7	
14	-62°339	+37°8'19	65	242	9°1	9	+1°523	+13°6'22		15	-35°639	-38°5'42	66	196	8°7	11	+36°6'71	-13°2'44	66	207	10°1			
10	-62°194	+31°9'89				10	+6°770	+64°4'03	65	255	10°1	9	-34°0'78	-37°6'93		14	+37°9'80	-22°1'09	66	208	9°2			
9	-61°282	+61°4'75				13	+10°2'17	+47°8'96	65	256	9°5	9	-33°358	-48°9'89		10	+37°9'99	-11°0'17						
10	-60°920	+28°4'09				10	+10°274	+11°6'8		11	-31°412	-54°3'01			66	198	8°7	11	+38°9'40	-1°5'89	66	209	9°7	
9	-60°503	+48°2'68				10	+17°089	+47°1'30	65	257	10°1	16	-30°790	-2°4'52	66	198	8°7	11	+40°0'27	-0°8'73	66	210	9°7	
9	-59°333	+28°9'34				10	+18°378	+50°7'82		10	-28°507	-21°7'05			9	+43°5'80	-1°2'27	10	+41°9'20	-25°7'57				
11	-58°395	+52°3'39				10	+18°555	+12°9'19	65	258	10°0	9	-28°0'46	-25°6'58		9	+43°5'80	-1°2'27	9	+43°5'80	-1°2'27			
11						61				121					181									
10	-55°180	+4°8'58				10	+20°564	+31°4'48		10	-26°781	-6°583			11	+43°9'46	-29°4'17	66	211	10°1				
13	-50°830	+30°7'33	65	243	9°6	9	+20°716	+11°9'86		9	-26°506	-31°9'79			23	+44°4'30	-61°9'44	67	253	8°2				
9	-49°046	+50°5'89				21	+20°798	+23°9'89	65	259	8°7	24	-24°728	-64°7'32	67	236	7°7	14	+45°1'13	-7°0'08	66	212	9°2	
10	-49°026	+4°2'80				9	+25°142	+59°0'91		12	-21°301	-40°8'24			12	+47°2'72	-60°5'68	67	254	9°5				
9	-48°950	+28°0'47				9	+25°796	+50°0'78		9	-20°630	-32°3'60			9	+48°9'48	-47°5'09							
9	-61°282	+61°4'75				9	+25°984	+63°7'37		11	-19°556	-56°4'29			9	+49°3'99	-48°3'32							
10	-60°920	+28°4'09				9	+26°731	+13°4'46		11	-18°200	-57°6'32			9	+49°8'64	-49°3'58							
9	-60°503	+48°2'68				14	+29°152	+46°4'20	65	260	9°3	41	-16°654	-5°8'64	66	199	6°9	14	+50°7'28	-9°6'58	66	214	9°4	
9	-59°333	+28°9'34				9	+30°837	+23°3'67		9	-16°441	-14°1'33			10	+52°3'47	-4°3'98							
11	-58°395	+52°3'39				11	+33°699	+40°6'37	65	261	10°1	9	-12°891	-41°8'24		9	+55°5'08	-46°1'15						
10	-55°180	+4°8'58				71				131					191									
13	-50°830	+30°7'33	65	243	9°6	9	+33°992	+9°2'11		9	-12°840	-47°8'62			10	+55°9'94	-0°6'65							
9	-49°046	+50°5'89				9	+34°919	+36°9'42		9	-11°285	-37°6'06			23	+56°4'52	-50°2'61	66	215	7°5				
10	-49°026	+4°2'80				9	+35°606	+50°4'88		9	-11°129	-59°2'77			11	+56°6'74	-18°5'83							
9	-48°950	+28°0'47				11	+36°527	+29°6'82		9	-10°103	-44°7'70			9	+59°4'93	-50°2'30							
9	-48°950	+28°0'47				11	+37°617	+32°7'62	65	262	10°1	9	-7°642	-33°4'85		12	+61°1'49	-3°0'64	66	216	10°1			
14	-45°288	+9°9'25	65	244	8°8	9	+40°817	+20°3'39		10	-4°096	-22°3'72			10	+62°2'14	-6°5'76							
10	-43°371	+7°1'27				9	+41°712	+29°3'95		9	-3°915	-16°3'32			9	+63°0'78	-44°0'07							
14	-42°840	+19°8'40	65	245	9°6	64	+44°364	+52°7'14	65	263	4°8	9	-3°402	-21°7'27		12	+64°6'21	-62°0'39	67	258	9°2			
9	-42°653	+31°2'75				10	+44°511	+40°9'48		9	-3°236	-13°3'86			12	+64°8'12	-24°1'40	66	217	10°1				
16	-41°676	+40°4'53	65	246	8°6	9	+47°403	+24°7'61		9	+1°077	-4°0'32												
21						81				141														
18	-40°438	+30°0'55	65	247	8°4	14	+50°649	+2°7'30	66	213	9°1	9	+2°005	-9°4'71										
20	-39°872	+60°8'80	65	248	8°5	11	+52°482	+36°1'43	65	264	10°1	9	+2°088	-47°9'26										
9	-37°239	+53°8'04				11	+53°508	+47°7'09		9	+2°217	-39°4'20												
10	-36°304	+34°4'63				14	+55°591	+28°0'29	65	265	9°4	9	+2°735	-44°6'86										
10	-34°008	+41°1'76				10	+56°708	+23°0'65		9	+2°888	-1°3'29												
9	-33°872	+32°8'50				10	+57°183	+5°5'76		20	+3°348	-51°5'87	66	200	8°4									
10	-33°163	+64°1'84				14	+57°511	+53°9'88	65	266	9°5	11	+3°588	-57°8'21	67	243	10°1							
9	-32°949	+23°8'54				11	+58°369	+42°1'01	65	267	10°1	9	+5°331	-60°1'97										
11	-32°348	+18°6'61				10	+59°495	+7°2'57		9	+7°205	-50°6'44												
14	-31°822	+0°8'58	66	197	8°5	10	+59°558	+55°7'76	65	268	10°1	9	+7°827	-25°5'00										
31						91				151														
14	-31°132	+30°1'08	65	249	9°4	11	+60°220	+61°8'52	65	269	10°1	9	+8°503	-29°4'00										
14	-30°8'8	+14°9'32	65	250	8°7	9	+60°810	+7°0'02		13	+8°712	-24°7'63	66	201	9°6									
9	-29°094	+4°8'41				10	+61°846	+0°7'11		13	+11°337	-22°0'03	66	202	9°6									
9	-27°551	+10°5'94				10	+62°366	+5°5'25		9	+15°570	-21°4'15												
9	-24°099	+19°4'67				11	+63°173	+63°7'54	65	270	10°1	10	+19°226	-45°2'34										
9	-20°277	+58°5'02				9	+64°156	+43°8'79		9	+22°141	-21°3'48												
11	-19°809	+61°0'16				10	+64°748	+3°0'61		11	+22°871	-47°0'98												
27	-17°502	+58°1'32	65	251	7°7	11	+64°668	-1°4'18		10	+23°820	-52°9'83												
12	-16°736	+42°9'12				9	+64°611	-63°5'10		11	+23°967	-51°2'49												
13	-16°473	+29°0'82	65	252	9°3	14	+62°090	-13°1'71	66	194	9°1	9	+25°048	-63°4'34										
41						101				161														
10	-14°804	+40°7'73				9	+61°134	-28°3'03		9	+25°595	-6°1'03												
10	-12°152	+26°4'44				10	+60°316	-55°3'72		9	+26°166	-32°9'53												
9	-11°966	+30°3'39				9	+58°776	-55°3'13		24	+27°578	-48°4'40	66	203	7°9									
10	-11°358	+31°0'61				9	+58°256	-54°7'80		9	+27°887	-64°2'37												
9	-10°252	+12°2'02				10	+57°290	-57°2'69		16	+28°122	-63°8'55	67	248	8°8									
15	-9°856	+36°2'59	65	253	8°9	9	+55°824	-45°2'82		9	+28°284	-31°9'09												
10	-9°131	+46°4'72				12	+54°887	-36°3'45		9	+29°534	-53°1'51												

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
PLATE CENTRE. 3h 54m, - 66°. Plate 860. 1893, Dec. 30. PROVISIONAL CONSTANTS. $a = -0.01147$ $d = -0.00090$ $b = +0.00094$ $e = -0.01152$ $c = +0.0281$ $f = -0.0641$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																							
9	-62°025	+11°263	65	264	10°1	15	51 -10°392	+58°303	65	287	9°1	10	111 +62°451	+40°114	65	300	10°1	12	171 +10°008	-52°575	66	234	10°1
10	-61°356	+35°791				14	-10°362	+34°491				10	+63°319	+30°028				9	+11°719	-55°170			
9	-61°174	+47°419				10	-9°476	+45°272				14	+63°686	+6°976				15	+11°859	-5°400			
15	-60°751	+2°306				10	-8°667	+56°024				24	-62°235	-62°620				10	+13°442	-15°863			
15	-57°669	+27°939				9	-8°165	+56°025				15	-59°775	-10°023				11	+16°414	-6°135			
11	-57°643	+53°969	65	266	9°5	9	-8°143	+63°476	66	230	9°2	11	-59°507	-61°034	67	254	9°5	9	+17°645	-3°343	66	237	10°1
9	-56°197	+23°063				9	-7°819	+35°588				9	-58°780	-47°872				12	+21°105	-47°250			
10	-55°927	+42°177				15	-6°504	+1°646				10	-58°530	-4°646				14	+21°743	-53°680			
9	-55°743	+55°898				9	-5°942	+49°412				9	-58°251	-48°671				9	+22°417	-55°359			
9	-55°515	+62°020				9	-5°742	+8°256				9	-57°730	-49°650				12	+22°446	-8°137			
9	-54°447	+5°654	65	270	10°1	11	61 -5°469	+28°496	65	288	10°1	10	121 -55°174	-0°651	66	215	7°5	20	181 +24°956	-10°011	66	240	8°3
9	-52°722	+64°114				9	-4°616	+6°252				12	-53°178	-18°476				15	+29°064	-33°964			
9	-52°253	+7°495				9	-2°045	+51°253				9	-52°356	-46°010				15	+29°546	-32°220			
9	-50°937	+7°342				11	+0°413	+22°408				30	-51°097	-50°092				14	+30°173	-55°297			
10	-50°286	+44°373				18	+2°140	+25°784				12	-49°877	-2°673				9	+30°359	-36°901			
10	-49°447	+1°144	65	271	9°2	15	+2°916	+45°801	65	292	9°5	10	-48°533	-6°105	66	217	10°1	11	+33°294	-55°039	66	244	8°3
10	-49°265	+5°981				9	+3°518	+46°877				9	-48°050	-49°810				24	+34°218	-28°052			
15	-48°837	+46°216				9	+4°598	+27°312				9	-44°962	-43°355				15	+35°942	-19°059			
9	-47°932	+28°108				9	+4°759	+15°923				13	-44°677	-23°425				9	+36°713	-29°731			
9	-47°276	+29°883				12	+4°970	+64°996				14	-44°031	-8°389				10	+37°039	-29°665			
9	-46°724	+3°703	65	272	8°2	20	71 +5°057	+31°790	65	294	7°7	16	-43°617	-8°295	66	219	9°2	14	+39°869	-37°761	66	246	10°1
19	-45°998	+51°315				9	+5°121	+13°409				16	-42°087	-61°218				13	+40°068	-39°265			
9	-45°379	+22°531				9	+5°167	+41°480				10	-40°217	-7°757				14	+41°943	-26°167			
9	-44°210	+13°795				9	+5°333	+38°786				9	-39°493	-44°096				9	+42°220	-25°942			
9	-43°956	+42°984				9	+7°087	+11°329				11	-38°929	-56°674				9	+42°998	-35°517			
9	-43°412	+49°433	65	273	10°1	9	+7°242	+1°939	65	297	10°1	13	-37°804	-21°041	66	220	10°1	10	+43°148	-27°561	66	251	9°5
10	-42°686	+48°441				9	+8°527	+27°050				13	-36°201	-5°175				9	+43°850	-3°104			
9	-42°418	+9°436				9	+10°689	+59°677				9	-35°445	-9°187				10	+43°988	-42°528			
9	-38°658	+13°274				9	+11°147	+19°757				9	-32°956	-2°592				9	+44°945	-51°322			
9	-31°289	+12°453				9	+12°233	+5°295				9	-32°252	-12°253				11	+45°564	-42°381			
13	-30°777	+37°301	65	276	9°8	15	81 +12°691	+21°470	65	295	9°2	10	-32°206	-2°443	66	221	9°8	12	+45°912	-50°338	66	249	10°1
10	-29°975	+24°540				9	+12°730	+23°412				11	-31°891	-1°529				14	+46°487	-50°772			
9	-29°204	+43°665				9	+13°885	+43°811				10	-31°178	-14°641				9	+47°760	-14°501			
11	-25°921	+29°456				9	+20°091	+57°413				16	-27°614	-13°747				9	+48°600	-53°014			
9	-25°567	+17°222				16	+20°293	+52°975				9	-26°995	-57°143				9	+53°614	-9°913			
10	-24°466	+26°776	65	277	10°0	15	+20°895	+40°212	65	296	9°1	30	-25°228	-39°253	66	222	9°7	11	+54°947	-15°730	66	250	10°0
17	-23°494	+25°054				10	+21°289	+44°309				10	-24°016	-37°879				15	+56°419	-48°789			
9	-23°013	+40°173				9	+21°351	+24°394				14	-23°259	-58°210				13	+57°990	-29°613			
9	-20°472	+42°638				9	+22°150	+13°613				9	-22°017	-8°630				10	+58°458	-25°414			
10	-19°643	+55°039				9	+23°559	+58°203				11	-19°287	-44°074				10	+58°715	-15°269			
10	-17°605	+62°472	65	278	10°0	9	91 +26°790	+27°014	65	296	9°1	14	-19°038	-4°398	66	223	7°8	11	+54°947	-15°730	66	251	9°5
9	-17°340	+29°706				9	+29°104	+31°191				10	-18°611	-54°670				15	+56°419	-48°789			
12	-16°616	+23°306				10	+29°436	+16°827				10	-17°880	-6°907				13	+57°990	-29°613			
11	-16°193	+37°238				10	+30°510	+32°438				18	-14°650	-13°503				10	+58°715	-15°269			
15	-15°179	+5°968				9	+31°921	+42°179				10	-13°285	-35°834				9	+59°024	-18°501			
9	-14°387	+5°727	65	279	8°4	9	+33°616	+50°226	65	298	9°2	14	-19°038	-4°398	66	224	9°5	10	+60°203	-46°713	66	252	9°8
12	-13°979	+13°294				15	+33°888	+35°308				9	-18°611	-54°670				15	+56°419	-48°789			
9	-12°627	+19°481				9	+35°203	+49°066				10	-17°880	-6°907				13	+57°990	-29°613			
9	-12°294	+36°746				9	+36°279	+21°185				10	-17°880	-6°907				10	+58°458	-25°414			
15	-12°146	+33°094				9	+38°257	+30°628				10	-13°285	-35°834				9	+59°024	-18°501			
9	-11°438	+5°727	65	280	9°7	9	101 +42°229	+45°179	65	299	9°1	12	-12°011	-62°399	66	225	9°0	9	+59°024	-18°501	66	253	10°1
12	-11°340	+29°706				10	+45°569	+40°702				16	-10°152	-37°280				10	+60°203	-46°713			
9	-10°616	+23°306				9	+45°867	+14°452				10	-10°152	-37°280				12	+60°932	-2°603			
11	-10°193	+37°238				9	+50°622	+9°102				10	-9°785	-17°500				15	+62°522	-14°438			
15	-10°179	+5°968				9	+52°251	+36°221				10	-9°785	-17°500				9	+62°886	-1°989			
9	-10°146	+33°094	65	281	10°1	9	+52°596	+36°770	65	300	10°1	12	-10°152	-37°280	66	226	9°2	9	+62°886	-1°989	66	254	9°4
12	-10°134	+29°706				15	+52°888	+35°308				10	-9°785	-17°500				15	+62°522	-14°438			
9	-9°616	+23°306				9	+53°203	+49°066				10	-9°785	-17°500				9	+62°886	-1°989			
11	-9°193	+37°238				9	+53°279	+21°185				10	-9°785	-17°500				9	+62°886	-1°989			
15	-9°179	+5°968				9	+53°357	+30°628				10	-9°785	-17°500				9	+62°886	-1°989			
9	-9°146	+33°094	65	282	10°1	9	+53°438	+36°770	65	301	10°1	12	-10°152	-37°280	66	227	9°0	9	+62°886	-1°989	66	255	10°1
12	-9°134	+29°706				10	+53°569	+40°702				16	-10°152	-37°280				15	+62°522	-14°438			
9	-8°616	+23°306				9	+53°867	+14°452				10	-9°785	-17°500				9	+62°886	-1°989			
11	-8°193	+37°238				9	+53°922	+9°102				10	-9°785	-17°500				9	+62°886	-1°989			
15	-8°179	+5°968				9	+53°977	+36°221				10	-9°785	-17°500				9	+62°886	-1°989			
9	-8°146	+33°094	65	283	9°2	9	+54°055	+29°269	65	302	10°1	12	-10°152	-37°280	66	228	9°1	9	+62°886	-1°989	66	256	10°1
12	-8°134	+29°706				15	+54°138	+35°308				16	-10°152	-37°280				15	+62°522	-14°438			
9	-7°616	+23°306				9	+54°211	+49°066				10	-9°785	-17°500				9	+62°886	-1°989			
11	-7°193	+37°238				9	+54°279	+21°185				10	-9°785	-17°500				9	+62°886	-1°989			
15	-7°179	+5°968				9	+54°357	+30°628				10	-9°785	-17°500				9	+62°886	-1°989			
9	-7°146	+33°094	65	284	10°1	9	+54°438	+36°770	65	303	10°1	12	-10°152	-37°280	66	229	9°2	9	+62°886	-1°989	66	257	10°1
12	-7°134	+29°706				15	+54°521	+35°308				16	-10°152	-37°280				15	+62°522	-14°438			
9	-6°616	+23°306				9	+54°604	+49°066				10	-9°785	-17°500				9	+62°886	-1°989			
11	-6°193	+37°238				9	+54°677	+21°185				10	-9°785	-17°500				9	+62°886	-1°989			
15	-6°179	+5°968				9	+54°757	+30°628				10	-9°785	-17°500				9	+62°886	-1°989			
9	-6°146	+33°094	65	285	9°5	9	+54°838	+36°770	65	304	10°1	12	-10°152	-37°280	66	230	9°1	9	+62°886	-1°989	66	258	10°1
12	-6°134	+29°706				15	+54°921	+35°308				16	-10°152	-37°280				15	+62°522	-14°438			
9	-5°616	+23°306				9	+54°994	+49°066				10	-9°785	-17°500				9	+62°886	-1°989			
11	-5°193	+37°238				9	+55°067	+21°185				10	-9°785	-17°500				9	+62°886	-1°989			
15	-5°179	+5°968				9	+55°147	+30°628				10	-9°785	-17°500				9	+62°886	-1°989			
9	-5°146	+33°094	65	286	10°1	9	+55°228	+36°770	65	305	10°1	12	-10°152	-37°280	66	231	9°2	9	+62°886	-1°989	66	259	10°1
12	-5°134	+29°706				15	+55°311	+35°308				16	-10°152	-37°280				15	+62°522	-14°438			
9	-4°616	+23°306				9	+55°384	+49°066				10	-9°785	-17°500				9	+62°886	-1°989			
11																							

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
PLATE CENTRE. 4h 12m, - 66°. Plate 550. 1892, Dec. 23. PROVISIONAL CONSTANTS. <i>a</i> = - 0.01146 <i>d</i> = - 0.00102 <i>b</i> = + 0.00090 <i>e</i> = - 0.01138 <i>c</i> = - 0.0641 <i>f</i> = + 0.0530 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																				
9	-61°417	+22°916			11	+1°188	+58°340	65	316	10°1	9	-62°219	-15°253		13	+12°103	-37°193			
9	-61°389	+35°660			9	+1°208	+38°596				9	-61°490	-51°124	66	249	10°1	9	+14°746	-53°334	
9	-61°089	+36°244			9	+1°910	+5°621				9	-60°887	-51°512	66	250	10°0	11	+15°576	-23°884	
9	-61°067	+8°499			22	+2°170	+8°131	65	317	8°4	10	-54°967	-15°946		12	+17°160	-25°279			
18	-53°579	+27°355	65	299	9°1	11	+3°275	+63°040	65	318	10°1	9	-51°251	-15°221		9	+17°215	-50°139		
						10	+3°295	+47°781				15	-51°131	-48°835	66	251	9°5	9	+18°843	-55°743
						9	+4°266	+46°991				13	-50°937	-29°596	66	252	9°8	24	+19°711	-28°341
						11	+5°410	+55°641				10	-50°775	-25°363		10	+20°146	-27°743	66	267
						10	+6°646	+49°547				9	-50°707	-18°427		9	+21°507	-52°031	8°	
						10	+7°061	+36°656				14	-49°961	-2°444	66	253	10°1	9	+21°706	-55°041
						61						121						181		
						11	+7°830	+23°203	65	319	10°1	9	-48°051	-1°682		14	+21°766	-19°928	66	268
						32	+9°346	+47°639	65	320	7°7	9	-47°513	-46°475		10	+22°996	-23°358	10°1	
						9	+10°851	+22°191				15	-47°498	-14°122	66	254	9°4	9	+24°207	-22°744
						9	+12°533	+0°271				18	-45°224	-4°252	66	255	9°0	26	+24°275	-9°655
						10	+13°547	+15°799				11	-41°910	-10°821		10	+24°640	-53°571	66	269
						9	+16°879	+17°639				9	-41°456	-10°433		10	+24°679	-5°111	8°	
						9	+17°125	+57°191				11	-41°237	-6°954		9	+25°698	-2°115	8°3	
						9	+17°823	+39°728				11	-40°603	-6°227		27	+25°723	-56°333	66	270
						10	+18°013	+49°985				9	-37°051	-9°361		9	+32°115	-37°448		
						15	+20°443	+44°760	65	321	10°1	17	-33°791	-34°880	66	256	9°8	9	+34°275	-58°181
						71						131						191		
						10	+23°811	+51°051				10	-31°188	-4°678		24	+41°035	-12°960	66	272
						18	+23°987	+36°771	65	322	8°7	28	-30°618	-43°387	66	257	8°3	16	+41°259	-17°581
						9	+24°211	+51°041				10	-28°591	-14°356	66	258	10°1	14	+43°346	-2°324
						9	+24°921	+4°084				9	-25°355	-56°122		12	+44°817	-11°326	66	274
						22	+25°791	+7°464	65	323	8°7	9	-23°479	-50°106		11	+44°884	-36°206	10°1	
						9	+26°131	+3°676				9	-21°886	-61°018		9	+45°325	-50°894		
						9	+26°598	+47°493				9	-19°329	-5°561		9	+45°608	-8°673		
						12	+28°061	+34°539	65	324	10°1	20	-18°093	-18°758	66	259	8°7	10	+46°765	-42°368
						9	+28°446	+22°792				9	-17°473	-24°847		18	+50°195	-28°017	66	275
						18	+29°923	+40°688	65	325	9°2	10	-17°056	-47°764		11	+50°457	-38°895	9°5	
						81						141						201		
						10	+29°931	+46°911				11	-15°855	-36°662		20	+50°819	-29°709	66	276
						10	+31°031	+47°548				10	-15°161	-49°061		12	+51°827	-14°928	66	277
						28	+31°433	+2°610	66	271	8°1	9	-15°019	-24°467		10	+51°851	-1°630		
						13	+32°084	+54°739	65	326	9°7	11	-13°326	-7°821	66	260	10°1	16	+52°251	-5°045
						19	+34°044	+47°398	65	327	8°9	9	-12°212	-13°048		10	+53°004	-27°801	66	278
						9	+34°246	+19°083				9	-11°398	-53°285		11	+54°710	-34°217		
						9	+35°281	+11°775				11	-9°078	-43°480	66	261	10°1	13	+55°894	-29°770
						10	+36°325	+24°635				15	-8°397	-26°889	66	262	9°8	11	+57°315	-27°604
						9	+37°873	+54°602				15	-8°130	-4°781	66	263	10°1	9	+59°154	-30°799
						9	+39°402	+18°245				11	-8°056	-24°589		9	+61°098	-14°764		
						91						151						211		
						22	+42°354	+39°232	65	328	8°8	9	-5°435	-4°579		17	+62°272	-16°651	66	281
						9	+44°520	+18°063				9	-4°252	-61°513						
						14	+46°085	+51°250	65	330	9°5	9	-2°835	-32°088						
						15	+46°245	+57°812	65	329	9°7	21	-2°505	-53°295	66	264	8°3			
						9	+46°517	+41°984				9	-1°302	-17°825						
						9	+47°142	+55°555				9	-1°220	-34°253						
						9	+47°528	+29°173				10	-0°778	-22°646						
						9	+49°908	+44°690				9	+0°208	-26°077						
						11	+51°758	+10°416	65	331	9°6	10	+3°758	-10°326						
						9	+51°891	+4°088				15	+6°391	-18°366	66	265	9°8			
						101						161								
						9	+55°377	+35°853				9	+6°837	-56°711						
						9	+58°769	+9°016				9	+7°760	-42°950						
						9	+59°566	+21°846				9	+8°205	-41°265						
						11	+60°675	+23°157	65	332	9°5	10	+8°751	-39°210						
						10	+61°810	+24°241	65	333	9°8	9	+8°921	-38°642						
						22	+61°882	+1°026	66	280	8°8	19	+10°250	-60°337	67	296	8°4			
						10	+64°290	+42°851	65	334	9°6	9	+10°465	-5°254						
						9	-63°966	-43°471				9	+11°040	-20°034						
						9	-62°419	-43°221				15	+11°472	-63°219	67	298	9°4			
						9	-62°401	-52°172				15	+11°725	-43°574	66	266	10°1			
						22	+61°882	+1°026	66	280	8°8	19	+10°250	-60°337	67	296	8°4			
						10	+64°290	+42°851	65	334	9°6	9	+10°465	-5°254						
						9	-63°966	-43°471				9	+11°040	-20°034						
						9	-62°419	-43°221				15	+11°472	-63°219	67	298	9°4			
						9	-62°401	-52°172				15	+11°725	-43°574	66	266	10°1			

C.P.D.					C.P.D.					C.P.D.					C.P.D.								
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.				
PLATE CENTRE. 4h 30m, - 66°. Plate 534. 1892, Dec. 19. PROVISIONAL CONSTANTS. a = - 0.01155 d = - 0.00071 b = + 0.00062 e = - 0.01141 c = - 0.0356 f = - 0.0714 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f																							
9	-64.456	+44.189	65	331	9.6	9	51, -10.903	+43.910	65	348	9.5	23	111, +54.893	+31.317	65	364	8.9	13	171, -4.334	-38.916	66	294	9.2
13	-60.163	+10.180				15	-8.770	+63.442				11	+55.859	+15.221				9	-4.032	-55.122			
9	-58.376	+35.770				9	-8.661	+53.210				9	+55.921	+13.628				12	-3.840	-42.158			
10	-53.192	+22.131				11	-7.673	+40.496				24	+57.363	+7.612				17	-3.716	-57.472			
9	-53.079	+9.256				9	-7.498	+8.963				13	+60.688	+11.378				13	-2.247	-19.937			
14	-52.170	+23.513	65	332	9.5	21	-6.886	+64.412	64	345	9.0	12	+61.712	+8.901	65	367	9.8	16	-2.153	-19.752	66	295	9.8
13	-51.137	+24.665				52	-6.698	+24.765				9	+64.624	+21.963				9	-0.812	-51.111			
9	-50.122	+44.331				9	-6.653	+20.795				11	-64.921	-9.302				12	-0.658	-62.465			
12	-49.980	+43.407				9	-5.971	+49.844				12	-63.673	-36.852				14	-0.153	-33.035			
9	-49.877	+33.903				9	-3.193	+47.039				11	-61.353	-42.853				20	+1.761	-12.064			
24	-49.385	+1.530	66	280	8.8	9	61, -1.956	+56.553	64	348	9.4	11	121, -59.183	-1.854	66	275	9.5	12	+2.001	-18.516	66	297	9.9
9	-49.341	+56.002				9	+0.532	+29.296				16	-58.966	-28.298				11	+3.168	-51.382			
9	-46.655	+64.015				16	+1.154	+64.716				16	-58.545	-5.229				9	+3.199	-35.962			
11	-46.201	+32.636				9	+1.444	+59.839				12	-58.269	-15.121				9	+3.552	-63.265			
9	-42.707	+63.007				9	+1.763	+32.343				21	-58.223	-29.931				10	+4.860	-24.377			
11	-40.040	+18.184	65	333	9.8	9	+3.947	+48.369	66	298	9.6	12	-57.939	-39.118	66	278	9.2	12	+4.913	-35.920	66	300	9.3
10	-39.110	+23.949				13	+3.956	+2.343				11	-56.177	-27.869				11	+6.467	-11.312			
9	-37.999	+37.882				9	+4.267	+54.246				12	-54.027	-34.143				15	+11.719	-35.867			
9	-36.767	+46.360				9	+5.008	+50.707				14	-53.139	-29.615				11	+13.510	-16.098			
11	-34.275	+61.109				9	+5.015	+48.519				11	-51.907	-27.365				13	+17.204	-9.775			
17	-34.024	+48.078	65	337	9.6	15	71, +5.210	+1.530	65	350	9.3	11	-49.841	-30.421	66	281	9.2	10	+17.495	-57.293	66	301	9.8
10	-33.953	+19.310				9	+5.048	+3.169				11	-49.044	-14.305				9	+17.993	-32.683			
20	-33.715	+12.688				9	+7.510	+34.154				16	-47.723	-16.088				9	+20.261	-42.312			
9	-33.023	+25.882				18	+7.989	+45.082				9	-46.704	-2.534				17	+23.158	-4.934			
13	-32.977	+12.408				21	+8.869	+41.068				19	-44.714	-5.787				13	+23.224	-63.104			
9	-29.519	+25.823	65	338	9.8	10	+9.896	+33.959	65	351	9.1	9	-43.263	-4.716	66	282	8.8	36	+24.553	-24.114	66	302	9.2
10	-28.389	+6.108				23	+11.394	+57.016				16	-42.887	-22.590				17	+24.702	-48.138			
9	-27.851	+25.388				17	+11.904	+18.307				14	-42.314	-7.530				14	+25.169	-33.631			
9	-27.731	+15.307				9	+11.997	+49.197				12	-41.701	-23.658				12	+26.257	-13.032			
10	-26.784	+50.377				17	+12.006	+44.026				9	-39.787	-34.084				12	+28.663	-50.196			
22	-26.243	+7.579	65	336	9.3	21	81, +12.392	+47.980	65	353	9.3	11	141, -38.304	-49.087	67	316	6.8	8	+23.969	-44.402	66	306	9.2
18	-25.568	+11.752				27	+13.683	+32.829				44	-38.182	-59.072				12	+31.101	-50.415			
12	-25.021	+6.268				10	+15.589	+8.352				9	-37.669	-3.640				11	+31.303	-51.005			
9	-24.682	+20.281				11	+15.953	+46.829				9	-36.314	-38.069				9	+36.517	-17.548			
10	-24.006	+16.553				9	+18.455	+50.849				12	-35.778	-30.726				9	+37.153	-37.208			
17	-23.607	+16.838	65	341	9.4	11	+21.973	+50.603	65	357	9.0	12	-35.692	-30.904	66	285	8.1	11	+37.986	-20.581	66	307	8.6
9	-22.947	+57.981				9	+22.328	+22.897				12	-34.485	-0.800				26	+39.138	-38.593			
12	-21.521	+2.853				9	+23.673	+44.794				12	-33.686	-19.298				14	+41.546	-20.033			
15	-18.372	+35.939				19	+24.572	+59.855				9	-32.280	-45.630				12	+41.872	-58.469			
9	-17.215	+60.127				9	+25.146	+12.069				9	-32.063	-8.618				14	+42.749	-40.118			
17	-16.322	+55.660	65	339	8.8	9	91, +26.291	+29.399	65	358	9.8	12	151, -31.658	-16.201	66	286	9.8	30	+43.902	-40.622	66	310	8.6
11	-16.263	+7.472				9	+30.791	+17.641				38	-31.312	-2.437				20	+44.294	-19.818			
31	-13.624	+4.065				9	+31.109	+5.376				10	-28.160	-29.631				14	+45.442	-47.588			
11	-13.422	+18.367				9	+31.498	+57.986				13	-26.276	-55.245				11	+46.122	-42.228			
20	-13.346	+4.199				13	+31.977	+3.382				10	-25.734	-10.139				11	+46.713	-28.007			
13	-13.015	+32.790	65	344	8.5	9	+33.846	+43.999	65	359	9.8	9	-25.312	-7.115	66	287	9.2	9	+46.833	-19.717	66	312	8.9
9	-12.422	+56.349				12	+35.677	+33.736				12	-25.204	-44.574				9	+47.546	-16.863			
10	-11.970	+46.802				9	+36.348	+2.673				10	-22.813	-36.470				11	+48.398	-17.268			
9	-11.415	+22.809				12	+37.371	+22.335				15	-22.557	-55.797				9	+49.809	-15.372			
23	-11.267	+53.474				12	+38.775	+56.669				13	-21.984	-25.589				9	+52.937	-26.482			
19	-10.760	+20.707	65	347	8.8	9	101, +39.609	+22.342	65	362	9.0	12	161, -18.517	-11.762	66	288	9.8	12	+54.797	-3.452	66	311	9.5
10	-10.7914	+54.022				9	+40.706	+57.326				15	-18.477	-7.767				18	+55.731	-13.804			
13	+48.244	+3.342				11	+42.024	+39.929				11	-17.999	-19.733				9	+55.974	-53.143			
17	+49.536	+5.154				13	+46.455	+34.707				14	-15.370	-31.097				9	+58.901	-38.544			
19	+50.225	+42.308				10	+47.621	+46.751				12	-14.168	-62.118				11	+59.165	-31.111			
19	+47.760	+20.707	65	361	9.1	9	+33.846	+43.999	65	362	9.0	12	-12.547	-37.260	66	291	9.4	10	+64.511	-14.268	66	312	8.9
10	+47.914	+54.022				12	+35.677	+33.736				12	-11.128	-55.168				18	+55.731	-13.804			
13	+48.244	+3.342				9	+36.348	+2.673				11	-7.698	-25.653				9	+55.974	-53.143			
17	+49.536	+5.154				12	+37.371	+22.335				9	-6.523	-42.148				9	+58.901	-38.544			
19	+50.225	+42.308				12	+38.775	+56.669				20	-5.164	-53.993				11	+59.165	-31.111			

C.P.D.					C.P.D.					C.P.D.					C.P.D.								
No.		Mag.		Diam.	No.		Mag.		Diam.	No.		Mag.		Diam.	No.		Mag.		Diam.	No.		Mag.	
No.		Mag.			No.		Mag.			No.		Mag.			No.		Mag.						
PLATE CENTRE.																							
4h 48m, - 66°.																							
Plate 535. 1892, Dec. 19.																							
PROVISIONAL CONSTANTS.																							
a = - .01145 d = - .00073																							
b = + .00051 e = - .01136																							
c = - .0986 f = - .1240																							
To obtain standard co-ordinates, ξ, η																							
$\xi = x + ax + by + c$																							
$\eta = y + dx + ey + f$																							
51,					111,					171,													
10	-17.421	+45.046			11	+64.190	+0.057			15	+5.772	-62.293	67	351	9.8								
14	-16.762	+56.394	65	379	9.9	12	-64.997	-59.330	67	334	9.6	9	+6.745	-38.478									
9	-16.389	+36.494			36	-64.263	-41.369	66	310	8.0	16	+7.726	-60.556	67	353	9.8							
12	-13.132	+28.143			10	-62.334	-28.597			15	+8.665	-8.043	66	330	9.3								
11	-12.984	+1.560			12	-62.224	-48.217	66	311	9.5	10	+8.998	-51.205										
20 -11.664 +23.009 65 380 9.0					10 -61.895 -42.777					9 +11.391 -22.158													
10 -10.502 +23.240					9 -61.413 -17.766					10 +11.556 -10.981													
15 -9.323 +48.504 65 381 9.6					10 -60.129 -15.743					15 +11.943 -33.142 66 331 9.5													
9 -7.350 +17.656					9 -56.235 -26.612					9 +11.989 -1.135													
10 -6.073 +30.201					12 -56.029 -3.512					12 +13.724 -23.858													
61					121					181													
10 -5.177 +44.670					20 -54.361 -13.781 66 312 8.9					13 +15.485 -5.981 66 332 9.6													
12 -3.619 +53.789					9 -51.280 -52.978					9 +15.536 -49.239													
14 -3.539 +15.165 65 382 9.5					12 -49.093 -30.784					10 +16.931 -56.007													
9 -2.706 +11.161					10 -49.441 -38.254					15 +17.509 -8.496 66 333 9.4													
13 -1.988 +22.006 65 383 9.9					9 -46.891 -52.129					9 +17.758 -41.341													
14 +1.244 +5.211 65 384 9.5					10 -45.581 -13.598					12 +18.444 -42.387													
22 +5.484 +14.859 65 385 9.0					9 -44.899 -3.822					10 +21.944 -61.360													
12 +5.639 +35.277					12 -42.837 -22.290					12 +23.368 -63.346													
12 +7.413 +34.332					9 -41.357 -12.303					12 +23.782 -16.018													
12 +8.448 +59.275					20 -40.837 -6.202 66 314 9.2					10 +24.193 -22.576													
71					131					191													
17 +9.728 +12.995 65 387 9.3					10 -40.532 -58.090					9 +24.398 -24.507													
22 +10.042 +45.675 65 386 9.0					9 -40.254 -46.413					14 +24.995 -54.314 66 335 9.9													
22 +12.599 +39.491 65 388 9.1					9 -40.092 -59.474					16 +25.223 -24.552 66 334 9.9													
9 +13.440 +26.833					10 -39.502 -2.534					11 +28.755 -19.426													
9 +14.468 +54.761					9 -39.453 -59.226					9 +29.959 -10.278													
9 +17.737 +49.219					10 -35.947 -34.047 66 316 9.8					21 +30.061 -16.360													
9 +19.635 +40.581					14 -35.100 -30.662					13 +30.405 -0.731 66 336 9.4													
9 +19.888 +2.948					29 -31.153 -43.711 66 317 8.0					40 +32.090 -50.869 66 338 8.0													
9 +20.059 +46.701					13 -29.955 -42.067					13 +32.427 -36.420 66 337 9.9													
12 +20.783 +58.175					18 -28.287 -33.065 66 318 9.1					10 +32.859 -22.042													
81					141					201													
9 +21.191 +25.379					30 -27.585 -56.444 66 319 8.4					9 +33.437 -50.489													
16 +23.423 +48.983 65 389 9.8					10 -26.175 -33.699					9 +35.290 -40.030													
12 +23.543 +26.621					21 -26.063 -59.814 67 343 9.0					9 +35.359 -29.681													
11 +24.035 +15.399					11 -23.003 -56.001					10 +37.615 -21.094													
14 +24.981 +24.327 65 390 9.3					9 -15.764 -57.696					9 +37.718 -36.368													
10 +25.693 +54.886					48 -14.336 -15.534 66 320 7.5					9 +38.236 -48.991													
11 +29.156 +61.667					28 -13.811 -42.551 66 321 8.6					11 +39.522 -51.905													
9 +31.333 +20.023					10 -13.271 -19.273					10 +39.678 -49.570													
9 +32.874 +2.536					11 -11.650 -51.931					16 +40.784 -55.551 66 339 9.4													
13 +33.144 +47.897					11 -11.186 -31.648					16 +41.113 -51.299 66 340 9.5													
91					151					211													
15 +33.666 +46.487 65 391 9.9					9 -10.002 -25.017					9 +41.667 -42.189													
10 +35.683 +15.028					12 -9.351 -34.301					13 +42.032 -61.683													
20 +36.641 +26.715 65 392 9.1					35 -7.438 -10.938 66 322 8.5					13 +42.358 -30.517													
10 +39.184 +1.021					11 -7.310 -13.956 66 323 9.9					10 +42.790 -5.306													
12 +40.967 +33.470					9 -6.807 -36.608					9 +43.170 -35.441													
16 +41.564 +53.093 65 393 9.2					14 -6.195 -24.212 66 324 9.7					11 +43.359 -38.542													
14 +44.206 +64.256 64 387 9.6					18 -5.619 -0.687 66 325 9.1					9 +43.892 -9.913													
11 +44.630 +18.954					22 -4.954 -17.750 66 326 8.9					9 +44.020 -26.080													
12 +44.939 +10.304					10 -3.986 -10.758					10 +44.086 -48.214													
9 +46.896 +22.902					10 -3.778 -18.469					11 +44.111 -33.365													
101					161					221													
10 +47.025 +4.449					10 -3.572 -0.457					14 +44.717 -25.447 66 341 9.6													
9 +52.985 +19.242					14 -2.384 -20.972 66 327 9.6					9 +45.194 -35.902													
56 +54.875 +49.686 65 394 6.6					10 -1.366 -41.503					12 +45.792 -54.012													
10 +55.213 +14.330					10 +0.473 -31.307					9 +45.961 -39.975													
12 +55.447 +20.200 65 395 9.5					22 +0.825 -39.224 66 328 8.9					9 +46.562 -35.177													
14 +58.417 +33.384 65 396 9.5					9 +2.621 -19.906					10 +46.704 -38.592													
14 +59.006 +17.452 65 397 9.9					14 +5.274 -58.528 67 350 9.8					9 +47.270 -36.472													
12 +59.659 +14.336					9 +5.310 -13.392					9 +47.911 -55.454													
11 +60.402 +47.087					12 +5.427 -56.801					9 +48.305 -42.262													
10 +62.245 +0.666					19 +5.624 -44.254 66 329 9.0					9 +48.749 -37.810													

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	171,					231,				PLATE CENTRE. 5h 24m, - 66°. Plate 142. 1892, Feb. 2. PROVISIONAL CONSTANTS. $a = -0.01186$ $d = +0.00110$ $b = -0.00116$ $e = -0.01171$ $c = +0.0683$ $f = -0.1106$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$													
10	-39°735	-0°814			12	-1°599	-44°974								9	+14°498	+37°689						
11	-39°718	-43°336	66	352	10°0	11	-0°941	-21°996	66	373	10°0	9	+14°787	+0°988									
11	-38°801	-3°380			31	+0°687	-5°729	66	374	8°9	9	+15°851	+46°212	65	471	10°0							
11	-35°801	-25°710			12	+2°194	-43°526			11	+16°709	+55°023	65	472	10°0								
15	-35°432	-9°907	66	353	9°3	11	+4°163	-24°750				10	+17°589	+21°053									
13	-35°194	-20°991	66	354	9°5	11	+6°166	-10°997				12	+22°027	+14°483	65	473	10°0						
14	-33°030	-37°788	66	356	9°5	14	+9°755	-21°059	66	375	9°5	9	+27°538	+16°463									
16	-32°635	-29°872	66	357	9°3	12	+10°494	-19°748	66	376	10°0	42	+27°957	+28°455	65	475	7°1						
12	-32°174	-5°146	66	359	10°0	9	+11°454	-47°317				11	+28°181	+61°312	65	474	9°5						
9	-31°966	-15°269			9	+11°988	-30°519					9	+29°153	+35°123									
	181					241																	
11	-30°886	-1°099			10	+15°997	-0°149			9	-62°079	+10°261	65	446	10°0	24	+30°733	+55°933	65	476	8°1		
11	-30°828	-4°519			12	+16°983	-30°005	66	377	10°0	9	-53°788	+57°147	65	447	10°0	12	+34°106	+5°061	65	477	9°8	
11	-30°724	-4°393	66	360	10°0	12	+17°120	-34°217			9	-44°215	+18°213	65	448	9°7	9	+36°396	+61°350	65	478	10°0	
12	-30°338	-1°269	66	361	10°0	18	+18°276	-18°023	66	378	8°9	9	-43°748	+38°594	65	449	9°7	9	+36°593	+15°799			
9	-29°474	-49°351			10	+18°400	-39°361			9	-43°730	+60°319	65	450	10°0	11	+38°140	+12°570					
11	-27°724	-45°696			9	+19°055	-31°038			9	-41°734	+47°454	65	451	9°5	15	+42°171	+27°350	65	479	8°5		
12	-26°900	-16°563			10	+19°790	-18°050			9	-39°272	+33°039				10	+43°236	+48°138	65	480	9°5		
9	-26°215	-29°238			14	+20°473	-48°198	66	379	9°5	14	-37°920	+22°043	65	452	9°2	9	+44°558	+17°647				
9	-25°771	-15°973			12	+21°825	-36°354			9	-37°062	+7°322				9	+44°771	+11°087					
14	-25°710	-2°236	66	362	9°3	10	+22°440	-52°807			10	-33°897	+0°550	66	394	10°0	12	+46°540	+4°867	65	481	10°0	
	191					251																	
9	-24°463	-29°479			23	+23°838	-33°130	66	380	8°8	10	-33°640	+12°591	65	453	10°0	9	+47°137	+15°027				
9	-23°721	-15°276	66	363	neb.	9	+27°323	-50°395			9	-32°578	+21°896				9	+47°290	+42°254				
11	-23°265	-51°520			13	+27°340	-12°582	66	381	9°7	9	-32°289	+13°981				9	+51°107	+1°580				
18	-21°980	-52°044	66	364	8°8	10	+28°606	-2°221			9	-28°470	+45°716	65	454	10°0	12	+51°727	+5°690	65	482	10°0	
11	-20°930	-47°234			9	+28°704	-48°569			24	-27°893	+18°772	65	455	8°7	9	+53°645	+14°371					
9	-20°793	-12°659			10	+29°537	-60°474			9	-26°799	+27°735				16	+56°542	+54°205	65	483	8°2		
11	-20°389	-14°256			9	+29°956	-3°776			9	-25°061	+12°751				9	+64°693	+16°331					
10	-20°296	-4°628			11	+30°875	-4°943			14	-22°663	+8°782	65	456	9°5	12	+64°907	+2°612	65	484	9°7		
12	-19°543	-25°789	66	365	10°0	18	+30°897	-49°144	66	382	8°8	9	-21°351	+27°328		9	-64°090	-20°811	66	384	10°0		
12	-19°437	-30°953	66	366	9°5	10	+32°835	-10°127			17	-19°892	+6°378	65	457	8°9	12	-63°018	-28°345	66	385	9°3	
	201					261																	
12	-19°390	-24°012	66	367	10°0	12	+35°727	-42°925			9	-19°615	+31°456				11	-60°215	-50°631	66	386	9°5	
9	-19°344	-4°136			10	+37°119	-0°601			10	-17°821	+48°574	65	458	9°7	10	-59°837	-41°260	66	387	9°5		
11	-19°085	-0°070	66	368	10°0	12	+37°686	-44°703			9	-17°070	+3°351				11	-56°701	-36°170	66	388	9°8	
11	-18°872	-36°341			11	+37°707	-25°945			9	-16°931	+9°670				11	-53°115	-3°580	66	389	9°8		
9	-18°420	-12°080			11	+39°237	-19°649			10	-16°482	+0°911	66	404	10°0	13	-47°984	-41°374	66	390	9°4		
10	-18°271	-30°466			12	+40°093	-59°821	67	397	9°8	9	-16°331	+4°123				13	-47°285	-15°019	66	391	9°7	
9	-18°122	-35°578			16	+43°599	-20°620	66	383	9°3	12	-16°293	+41°301	65	459	9°7	12	-46°242	-38°523	66	392	10°0	
11	-17°630	-49°770			9	+44°171	-5°732			9	-16°037	+9°353				12	-44°377	-3°958	66	393	10°0		
9	-17°413	-27°671			9	+44°620	-43°502			16	-15°913	+16°225	65	460	9°3	9	-41°252	-42°734					
15	-17°397	-63°612	67	382	9°1	11	+45°632	-20°213	66	384	10°0	16	-15°729	+9°644	65	461	9°5	10	-40°787	-25°137			
	211					271																	
9	-17°272	-29°310			15	+46°207	-27°801	66	385	9°3	16	-15°683	+2°385	65	462	9°4	10	-38°872	-8°002				
9	-17°036	-46°238			14	+47°428	-50°214	66	386	9°5	10	-15°485	+8°026				10	-37°388	-30°203				
10	-16°401	-24°287			13	+48°456	-40°901	66	387	9°5	9	-14°062	+5°602				9	-37°196	-37°349				
14	-15°726	-44°179	66	369	9°4	9	+48°545	-14°273			9	-12°589	+2°547				9	-36°150	-35°779				
14	-15°386	-46°807	66	370	9°4	9	+50°509	-54°918			10	-10°906	+15°859				12	-32°209	-54°840	66	395	9°8	
9	-14°047	-40°421			9	+51°383	-33°535			12	-10°163	+10°534	65	463	10°0	21	-28°485	-4°835	66	396	8°9		
9	-13°294	-33°445			13	+51°930	-36°049			11	-6°798	+8°754	65	464	10°0	10	-27°962	-3°154					
9	-12°807	-24°438			9	+51°935	-7°037			15	-2°920	+45°187	65	465	8°9	23	-25°793	-32°902	66	397	8°8		
9	-12°718	-34°311			9	+52°048	-44°920			9	-1°987	+27°111				36	-25°612	-9°553	66	399	7°3		
9	-12°281	-33°895			9	+52°394	-27°983			9	-1°154	+52°759	65	466	10°0	18	-25°604	-20°143	66	398	9°5		
	221					281																	
9	-11°644	-34°421	66	371	neb.	9	+52°531	-36°001	66	388	9°8	9	+2°479	+11°374		21	-24°912	-42°880	66	400	8°9		
9	-11°324	-40°901			9	+53°591	-33°045			9	+3°849	+22°749				10	-24°180	-53°759	66	401	10°0		
9	-11°013	-23°270			12	+57°805	-3°802	66	389	9°8	16	+4°510	+24°121	65	467	9°3	15	-24°168	-10°467	66	403	10°0	
10	-10°853	-34°484			14	+60°276	-41°843	66	390	9°4	10	+4°841	+23°565				12	-24°102	-43°358	66	402	9°8	
11	-8°591	-19°702			12	+62°214	-39°136	66	392	10°0	9	+5°816	+35°330				9	-23°340	-54°535				
9	-7°785	-23°251			12	+62°816	-15°618	66	391	9°7	10	+6°031	+7°403				9	-22°215	-39°404				
16	-5°200	-52°659	66	372	9°1	9	+63°253	-35°760			10	+8°088	+20°436				9	-21°392	-56°701				
10	-3°687	-10°559								15	+9°149	+56°443	65	468	9°1	9	-19°968	-32°141					
9	-3°234	-52°474								24	+10°295	+10°711	65	469	8°5	10	-19°945	-14°321					
14	-1°966	-59°409	67	389	9°4					12	+12°877	+9°162	65	470	10°0	14	-12°074	-12°259	65	405	10°0		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	111					171					231				PLATE CENTRE. 5h 42m, - 66°. Plate 143. 1892, Feb. 2. PROVISIONAL CONSTANTS. a = - 0.01145 d = - 0.00146 b = + 0.00150 e = - 0.01149 c = + 0.0187 f = + 0.3490 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						
9	-11°054	-47°825			9	+17°588	-46°428			10	+39°383	-54°279									
10	-10°829	-21°266			9	+18°855	-49°710			32	+40°153	-37°795	66	425	8°5						
14	-10°342	-47°458	66	406	10°0	9	+18°873	-46°032			10	+40°308	-58°115								
9	-9°892	-12°796			9	+18°969	-21°481			9	+41°017	-59°566									
9	-9°891	-61°101			10	+18°975	-10°879			11	+41°045	-59°615									
9	-9°850	-22°148			9	+19°006	-10°948			9	+41°095	-33°251									
10	-8°272	-20°452			9	+19°459	-27°217			9	+41°102	-55°393									
18	-7°254	-6°700	66	407	9°8	11	+19°647	-27°191			10	+41°253	-58°706								
14	-7°076	-17°945			9	+19°903	-40°690			11	+41°379	-52°401									
20	-5°819	-30°984	66	408	9°1	14	+20°797	-56°192			10	+41°475	-33°195								
	121					181					241										
10	-5°255	-7°012			9	+21°423	-37°504			9	+41°604	-46°628									
9	-5°160	-38°190			9	+21°665	-21°211			12	+43°5°5	-22°507									
12	-3°099	-47°954			9	+21°883	-18°661			9	+43°677	-33°155									
10	-2°998	-6°104			18	+22°296	-19°315	66	415	9°5	9	+43°826	-63°893	67	453	neb.	14	-59°824	+4°894		
15	-1°938	-44°844	66	409	10°0	12	+22°311	-22°612			11	+43°831	-62°981	67	452	10°0	9	-59°655	+2°794		
9	-1°471	-27°962			11	+23°269	-8°558			9	+43°881	-30°455									
9	-1°118	-25°726			12	+23°331	-43°766			9	+44°868	-47°320									
17	-0°914	-28°568	66	410	10°0	10	+24°192	-29°081			10	+45°326	-26°166								
10	-0°204	-30°636			20	+24°771	-37°272	66	416	9°2	30	+45°645	-45°958	66	426	8°5	9	-57°017	+42°209		
10	+0°350	-15°351			16	+25°366	-12°634	66	417	10°0	17	+47°270	-15°321	66	427	10°0	9	-53°877	+14°242		
	131					191					251										
10	+0°823	-29°202			13	+25°381	-46°428			10	+47°349	-36°452									
10	+0°862	-30°949			36	+25°666	-34°046			16	+48°102	-26°444	66	428	10°0	9	-52°671	+0°874			
10	+1°514	-30°385			13	+25°881	-8°700			9	+48°306	-44°804									
9	+2°264	-18°440			9	+25°969	-16°095			13	+49°972	-29°352	66	429	10°0	9	-50°975	+37°739			
9	+3°456	-42°784			9	+26°491	-36°196			10	+50°049	-46°688									
9	+3°542	-19°149			12	+26°519	-24°939			9	+50°080	-48°970									
14	+3°748	-13°079			11	+26°932	-49°636			10	+50°974	-33°219									
11	+4°309	-29°372			9	+27°181	-56°730			10	+51°410	-31°403									
9	+4°417	-10°774			9	+27°731	-52°778			9	+52°244	-27°789									
9	+4°422	-27°677			9	+27°799	-11°234			9	+52°989	-30°517									
	141					201					261										
10	+4°535	-61°001			10	+29°210	-6°274			10	+53°607	-56°087									
9	+4°608	-23°829			9	+29°503	-48°408			19	+53°931	-28°475	66	430	9°1	17	-46°470	+2°810	65	484	9°7
11	+4°645	-5°438			14	+29°977	-43°712			9	+54°356	-63°364									
17	+4°667	-55°994	66	411	9°5	28	+30°531	-46°512	66	418	8°5	9	+54°785	-62°096							
10	+4°792	-9°841			14	+30°770	-58°210	66	420	10°0	43	+55°386	-1°439	66	431	8°2	9	-43°468	+6°270		
9	+5°730	-6°116			11	+30°884	-0°628			9	+56°505	-40°870									
9	+5°732	-25°961			12	+31°045	-40°664			9	+56°635	-47°214									
10	+5°739	-3°388			26	+31°144	-42°117	66	419	8°4	9	+56°931	-11°797								
9	+6°307	-2°414			9	+31°416	-35°507			10	+57°221	-56°744									
10	+7°156	-38°255			9	+31°689	-57°552			9	+57°591	-1°653									
	151					211					271										
10	+7°788	-23°841			10	+31°957	-58°682			9	+57°938	-63°984									
24	+7°910	-11°844	66	412	8°4	36	+32°368	-31°455	66	421	7°7	10	+58°908	-39°910							
10	+9°124	-19°657			10	+32°993	-13°176			11	+59°521	-56°910	66	432	10°0	15	-36°962	+57°241	65	487	9°2
9	+9°637	-6°204			9	+33°018	-33°301			9	+60°391	-58°900									
9	+9°972	-21°517			22	+34°531	-7°376	66	422	9°2	9	+61°621	-19°201								
9	+10°212	-18°356			9	+34°823	-44°247			9	+62°425	-13°827									
9	+10°839	-46°422			10	+35°183	-41°819			12	+63°064	-64°167	67	467	9°5	9	-31°555	+9°150			
27	+12°083	-32°072	66	413	8°4	9	+35°852	-64°167			9	+63°667	-35°067								
9	+12°125	-19°805			9	+36°491	-38°719			9	+63°996	-63°501	67	469	9°8	10	-31°331	+40°380			
11	+12°465	-41°168	66	414	9°4	9	+36°599	-29°491			14	+64°000	-59°861	66	433	8°9	9	-30°834	+43°866		
	161					221															
10	+12°489	-20°609			10	+37°016	-28°891			10	+64°673	-3°997									
11	+13°073	-63°677			9	+37°217	-39°387														
11	+13°346	-45°450			9	+37°362	-62°431														
12	+14°069	-17°256			13	+37°956	-58°536	66	424	neb.											
9	+14°181	-13°716			9	+38°078	-59°724														
14	+14°522	-31°936			9	+38°324	-58°184														
11	+15°002	-63°830			22	+38°361	-39°683	66	423	9°1											
9	+15°695	-2°612			9	+38°417	-63°047														
10	+16°535	-47°381			9	+38°676	-34°068														
11	+16°553	-46°334			9	+38°876	-42°597														

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	51					111					171					231							
9	-23°072	+11°271			19	+17°469	+27°401	65°	498	9°3	9	-62°617	-64°185	67°	452	10°0	12	-37°028	-53°078	66°	435	10°0	
10	-23°001	+56°804			11	+17°719	+5°530				22	-62°043	-47°051	66	426	8°5	9	-36°782	-55°421				
9	-22°443	+48°280			12	+18°615	+12°651				9	-61°035	-37°439				14	-36°708	-18°275				
9	-21°575	+22°133			13	+19°539	+24°445				13	-61°019	-27°407	66	428	10°0	9	-36°696	-57°991				
9	-20°773	+45°561			14	+20°693	+54°393	65	499	9°6	9	-60°807	-57°934				16	-36°690	-1°746	66	436	10°0	
18	-19°902	+41°434	65	489	9°4	9	+20°800	+6°651			9	-59°006	-11°775				9	-36°644	-57°504				
9	-19°879	+34°052			17	+21°239	+49°911	65	500	9°3	11	-58°974	-30°169	66	429	10°0	9	-36°260	-44°070				
13	-19°705	+9°358			11	+21°486	+25°529				10	-57°675	-33°946				9	-36°045	-4°618				
12	-18°727	+4°093			11	+22°001	+24°056				9	-57°584	-47°438				10	-35°044	-57°152				
12	-18°647	+24°709			13	+24°774	+5°353				10	-57°380	-32°122				18	-34°672	-21°933	66	437	9°3	
	61					121						181					241						
12	-18°265	+22°640			10	+25°981	+28°091				9	-57°376	-49°684				10	-34°149	-5°523				
21	-16°453	+33°274	65	490	9°0	10	+27°087	+52°108			9	-56°790	-28°437				17	-33°901	-45°462	66	438	9°8	
10	-15°701	+28°248			21	+27°857	+28°499	65	501	9°0	9	-56°746	-18°399				11	-33°061	-51°244				
9	-14°195	+0°834			12	+28°847	+28°975				9	-55°378	-31°105				9	-32°979	-32°597				
9	-12°700	+0°085			18	+30°065	+30°416	65	502	9°4	9	-55°302	-16°453				10	-32°909	-27°501				
13	-12°336	+32°048			9	+30°304	+18°788				26	-55°618	-1°946	66	431	8°2	9	-32°333	-32°743				
9	-12°323	+24°954			9	+30°462	+22°115				9	-55°393	-1°505				11	-32°196	-12°203				
10	-11°912	+34°052			9	+30°669	+45°491				19	-55°065	-29°001	66	430	9°1	10	-31°100	-1°026				
11	-11°412	+15°303			11	+31°337	+50°986				9	-53°689	-2°458				11	-30°799	-50°436				
10	-10°955	+7°728			9	+34°964	+64°018				10	-53°439	-1°998				10	-30°778	-25°633				
	71					131						191					251						
10	-10°126	+14°501			10	+35°116	+11°473				10	-53°358	-56°528				60	-30°602	-38°145	66	439	5°7	
9	-9°868	+57°273			9	+35°217	+28°081				9	-52°062	-63°737				15	-30°396	-42°927				
10	-8°705	+27°506			14	+37°139	+55°939	65	503	9°4	9	-51°980	-15°382				11	-30°206	-29°828				
11	-7°874	+19°964			10	+37°252	+17°064				9	-51°720	-62°435				9	-30°091	-25°907				
10	-7°294	+13°301			10	+38°808	+21°955				10	-51°592	-41°168				13	-29°635	-43°142				
12	-6°543	+34°195			36	+39°850	+48°034	65	504	8°6	10	-50°622	-25°312				14	-29°296	-52°357	66	440	10°0	
10	-5°868	+7°171			9	+39°850	+49°475				10	-49°707	-56°928				10	-29°067	-25°929				
12	-5°740	+31°048			11	+40°841	+18°533				11	-49°272	-40°010				10	-28°884	-21°910				
18	-5°254	+30°438	65	491	9°0	17	+40°890	+5°693	65	505	9°6	11	-48°115	-19°194				14	-28°642	-24°041			
9	-4°885	+46°353			16	+41°167	+5°267	65	506	10°0	9	-48°093	-15°754				10	-28°608	-11°815				
	81					141						201					261						
9	-4°724	+28°345			10	+44°154	+44°591				11	-47°717	-13°779				9	-28°572	-41°835				
12	-3°841	+1°497			11	+44°756	+9°538				11	-47°382	-56°911	66	432	10°0	9	-28°106	-1°698				
15	-3°280	+16°943			9	+49°999	+48°520				9	-46°790	-53°063				9	-27°520	-45°395				
12	-2°835	+26°248			14	+50°309	+15°645				9	-46°496	-12°416				12	-26°172	-48°446				
10	-2°060	+21°675			11	+50°494	+48°526				9	-46°421	-24°428				10	-25°894	-45°634				
9	-1°930	+33°918			11	+51°162	+0°843				9	-46°361	-58°842				11	-25°423	-45°998				
11	-0°621	+15°069			11	+51°615	+19°642				12	-46°199	-3°806				11	-23°742	-22°028				
10	+0°428	+39°532			9	+52°071	+58°581				9	-45°799	-3°558				10	-18°645	-33°116				
23	+1°700	+49°838	65	492	8°9	44	+52°960	+42°314	65	507	7°9	9	-44°822	-40°266				9	-18°578	-18°107			
13	+2°220	+37°790			9	+54°476	+6°272				9	-44°570	-26°430				11	-17°519	-14°068				
	91					151						211					271						
11	+2°546	+16°929			13	+54°486	+48°450	65	508	10°0	9	-44°008	-48°903				12	-17°466	-52°260	66	441	10°1	
11	+3°409	+10°448			11	+55°150	+62°319	64	485	9°9	13	-43°334	-63°898	67	467	9°5	12	-16°879	-22°083				
14	+3°610	+18°008			10	+55°342	+57°854	65	509	10°0	18	-42°702	-59°565	66	433	8°9	9	-15°906	-49°386				
14	+4°194	+7°024			15	+55°349	+6°906	65	511	9°6	10	-42°444	-63°180	67	469	9°8	10	-15°357	-4°741				
9	+4°215	+30°103			14	+55°395	+28°644	65	510	10°0	9	-41°756	-8°949				11	-15°329	-51°191				
10	+4°720	+64°866			15	+55°506	+2°040	65	512	9°6	12	-41°638	-16°807				13	-14°242	-40°456				
9	+6°337	+2°758			10	+55°896	+53°541				12	-41°422	-59°237	66	434	9°5	9	-13°652	-2°700				
9	+6°850	+25°060			10	+56°703	+42°057				10	-40°531	-7°221				11	-11°679	-7°928				
24	+7°243	+13°740	65	493	8°8	10	+57°441	+30°402			11	-40°517	-3°915				14	-11°672	-59°397	66	442	9°4	
9	+7°270	+33°418			11	+57°533	+27°084				11	-40°444	-37°270				10	-10°847	-21°297				
	101					161						221					281						
10	+7°498	+52°661			11	+57°849	+12°328				10	-40°283	-6°309				14	-10°764	-58°127	66	443	9°4	
9	+7°533																						

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	111					171					231				PLATE CENTRE. 6h 18m, - 66°. Plate 144. 1892, Feb. 2. PROVISIONAL CONSTANTS. $a = -0.01207$ $d = +0.00469$ $b = -0.00484$ $e = -0.01203$ $c = +0.2857$ $f = -0.1951$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						
10	+29°267	+49°619	65	545	10°1	9	-41°787	-12°128		16	+23°162	-46°869	66	492	9°6						
15	+29°426	+18°794				9	-41°526	-6°964		19	+23°380	-29°203	66	491	9°3						
11	+29°612	+22°322				14	-40°607	-17°629	66	474	10°0	9	+24°943	-37°455							
11	+29°726	+29°929				18	-40°348	-25°908	66	473	9°1	11	+25°361	-6°614							
12	+30°994	+9°508				10	-39°455	-58°358				12	+29°814	-45°967							
20	+31°070	+9°670	65	546	8°7	12	-38°514	-35°698		10	+30°710	-8°536									
12	+31°318	+19°177				11	-37°477	-15°763		11	+31°970	-14°525									
12	+32°408	+61°400				10	-36°306	-51°635		11	+32°069	-40°226									
17	+32°412	+8°316	65	547	9°4	11	-34°705	-41°483		9	+33°499	-50°845									
11	+32°796	+61°291				12	-32°735	-58°098	66	475	10°1	10	+36°136	-9°352							
	121					181					241				9 -62°657 +3°719 18 -59°522 +56°163 9 -57°016 +18°340 9 -56°901 +42°791 10 -55°432 +20°282 65 556 9°6 9 -53°193 +33°859 36 -51°962 +42°795 65 557 8°1 20 -50°561 +6°890 65 558 9°0 15 -48°073 +19°990 65 559 9°4 18 -46°151 +37°305 65 560 9°0 11 9 -45°646 +8°513 48 -43°915 +26°150 65 561 6°7 11 -41°775 +4°858 65 562 10°1 9 -41°671 +59°336 65 563 9°9 9 -41°332 +7°110 9 -40°279 +20°929 20 -40°227 +29°011 65 564 9°0 9 -40°188 +12°093 40 -38°258 +29°889 65 565 7°3 28 -37°947 +29°734 65 566 8°5 21 15 -37°040 +16°253 65 567 9°9 9 -35°658 +52°640 15 -35°530 +16°380 65 568 10°0 10 -33°401 +3°900 18 -32°831 +13°167 65 569 9°0 15 -32°607 +15°835 9 -30°510 +53°220 20 -30°120 +33°889 65 570 9°0 9 -29°462 +1°090 9 -27°910 +51°068 31 22 -27°265 +30°870 65 571 8°8 11 -26°705 +12°698 9 -26°364 +25°500 17 -25°661 +17°583 65 572 9°1 9 -25°128 +30°840 9 -24°689 +23°747 9 -21°997 +31°496 9 -19°757 +8°765 9 -19°655 +3°542 10 -19°421 +19°688 41 9 -17°919 +1°181 9 -16°597 +33°270 9 -16°082 +55°959 9 -14°603 +29°910 9 -12°188 +37°089 9 -11°693 +6°680 9 -11°536 +8°564 9 -11°144 +25°460 10 -10°566 +7°646 9 -9°756 +37°750						
14	+33°081	+16°343	65	548	10°0	21	-32°032	-30°809	66	476	9°1	9	+36°284	-14°377							
13	+34°200	+26°793				9	-29°738	-1°914		66	+37°234	-1°993	66	493	5°7						
10	+34°510	+3°258				9	-27°446	-49°564		12	+38°042	-24°659									
10	+35°031	+47°532				9	-26°179	-62°592		16	+38°932	-4°659	66	494	9°7						
10	+35°269	+7°838				10	-25°714	-45°876		12	+40°128	-38°805									
9	+35°807	+23°666				10	-25°266	-36°261		9	+41°185	-39°201									
14	+35°839	+6°310	65	550	10°1	10	-24°953	-30°799		13	+41°262	-37°194									
24	+36°141	+42°502	65	549	8°5	11	-24°852	-44°267		10	+43°309	-53°212									
20	+37°821	+27°865	65	551	9°1	9	-24°000	-29°483		10	+46°176	-32°431									
11	+39°327	+9°209				16	-22°156	-35°140	66	477	10°0	10	+46°220	-1°044							
	131					191					251				9 -45°646 +8°513 48 -43°915 +26°150 65 561 6°7 11 -41°775 +4°858 65 562 10°1 9 -41°671 +59°336 65 563 9°9 9 -41°332 +7°110 9 -40°279 +20°929 20 -40°227 +29°011 65 564 9°0 9 -40°188 +12°093 40 -38°258 +29°889 65 565 7°3 28 -37°947 +29°734 65 566 8°5 21 15 -37°040 +16°253 65 567 9°9 9 -35°658 +52°640 15 -35°530 +16°380 65 568 10°0 10 -33°401 +3°900 18 -32°831 +13°167 65 569 9°0 15 -32°607 +15°835 9 -30°510 +53°220 20 -30°120 +33°889 65 570 9°0 9 -29°462 +1°090 9 -27°910 +51°068 31 22 -27°265 +30°870 65 571 8°8 11 -26°705 +12°698 9 -26°364 +25°500 17 -25°661 +17°583 65 572 9°1 9 -25°128 +30°840 9 -24°689 +23°747 9 -21°997 +31°496 9 -19°757 +8°765 9 -19°655 +3°542 10 -19°421 +19°688 41 9 -17°919 +1°181 9 -16°597 +33°270 9 -16°082 +55°959 9 -14°603 +29°910 9 -12°188 +37°089 9 -11°693 +6°680 9 -11°536 +8°564 9 -11°144 +25°460 10 -10°566 +7°646 9 -9°756 +37°750						
9	+41°120	+12°699				12	-21°415	-34°344		10	+46°365	-30°821									
10	+41°348	+25°874				24	-19°242	-19°431	66	478	8°9	14	+46°653	-60°382	66	495	9°4				
15	+41°426	+12°175	65	552	9°7	16	-19°032	-40°187	66	479	9°4	9	+46°819	-58°907							
10	+42°495	+42°618				12	-17°257	-44°177		12	+47°985	-21°570									
10	+43°760	+23°462				9	-16°936	-16°373		14	+48°218	-44°063	66	496	9°9						
10	+44°666	+22°866				9	-15°821	-64°343		18	+48°622	-0°816	65	554	9°4						
9	+46°646	+21°138				9	-15°173	-31°147		11	+50°874	-53°685									
10	+47°147	+42°917				14	-14°538	-10°229	66	480	9°7	15	+50°933	-18°606	66	497	9°8				
25	+48°001	+44°249	65	553	8°8	13	-13°817	-12°409	66	481	9°7	12	+51°354	-3°772							
12	+49°046	+3°739				9	-13°793	-64°279		10	+54°604	-4°474									
	141					201					261				9 -45°646 +8°513 48 -43°915 +26°150 65 561 6°7 11 -41°775 +4°858 65 562 10°1 9 -41°671 +59°336 65 563 9°9 9 -41°332 +7°110 9 -40°279 +20°929 20 -40°227 +29°011 65 564 9°0 9 -40°188 +12°093 40 -38°258 +29°889 65 565 7°3 28 -37°947 +29°734 65 566 8°5 21 15 -37°040 +16°253 65 567 9°9 9 -35°658 +52°640 15 -35°530 +16°380 65 568 10°0 10 -33°401 +3°900 18 -32°831 +13°167 65 569 9°0 15 -32°607 +15°835 9 -30°510 +53°220 20 -30°120 +33°889 65 570 9°0 9 -29°462 +1°090 9 -27°910 +51°068 31 22 -27°265 +30°870 65 571 8°8 11 -26°705 +12°698 9 -26°364 +25°500 17 -25°661 +17°583 65 572 9°1 9 -25°128 +30°840 9 -24°689 +23°747 9 -21°997 +31°496 9 -19°757 +8°765 9 -19°655 +3°542 10 -19°421 +19°688 41 9 -17°919 +1°181 9 -16°597 +33°270 9 -16°082 +55°959 9 -14°603 +29°910 9 -12°188 +37°089 9 -11°693 +6°680 9 -11°536 +8°564 9 -11°144 +25°460 10 -10°566 +7°646 9 -9°756 +37°750						
9	+50°269	+30°977				12	-13°245	-16°522	66	482	10°1	9	+55°251	-44°167							
28	+55°626	+55°821	65	555	8°8	12	-12°325	-9°606	66	483	10°1	10	+58°044	-16°124							
12	+55°635	+17°951				20	-11°132	-20°940	66	484	9°1	20	+60°784	-32°475	66	498	9°1				
14	+57°329	+19°793	65	556	9°6	16	-10°228	-41°957	66	485	9°9	9	+64°559	-37°490							
12	+57°354	+42°347				9	-7°913	-53°403													
9	+58°836	+6°988				9	-7°140	-49°779													
12	+60°472	+33°183				13	-4°604	-64°935	67	542	9°7										
20	+61°304	+6°112	65	558	9°0	9	-3°841	-32°377													
36	+62°301	+42°010	65	557	8°1	13	-2°937	-44°267													
15	+64°662	+19°026	65	559	9°4	10	-2°073	-23°647													
	151					211									9 -45°646 +8°513 48 -43°915 +26°150 65 561 6°7 11 -41°775 +4°858 65 562 10°1 9 -41°671 +59°336 65 563 9°9 9 -41°332 +7°110 9 -40°279 +20°929 20 -40°227 +29°011 65 564 9°0 9 -40°188 +12°093 40 -38°258 +29°889 65 565 7°3 28 -37°947 +29°734 65 566 8°5 21 15 -37°040 +16°253 65 567 9°9 9 -35°658 +52°640 15 -35°530 +16°380 65 568 10°0 10 -33°401 +3°900 18 -32°831 +13°167 65 569 9°0 15 -32°607 +15°835 9 -30°510 +53°220 20 -30°120 +33°889 65 570 9°0 9 -29°462 +1°090 9 -27°910 +51°068 31 22 -27°265 +30°870 65 571 8°8 11 -26°705 +12°698 9 -26°364 +25°500 17 -25°661 +17°583 65 572 9°1 9 -25°128 +30°840 9 -24°689 +23°747 9 -21°997 +31°496 9 -19°757 +8°765 9 -19°655 +3°542 10 -19°421 +19°688 41 9 -17°919 +1°181 9 -16°597 +33°270 9 -16°082 +55°959 9 -14°603 +29°910 9 -12°188 +37°089 9 -11°693 +6°680 9 -11°536 +8°564 9 -11°144 +25°460 10 -10°566 +7°646 9 -9°756 +37°750						
19	-63°060	-5°960	66	460	9°2	16	-1°836	-62°028	67	543	9°4										
16	-60°860	-																			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51					111					171					231			
9	- 9°236	+23°675			20	+51°961	+16°274	65	596	9°1	9	-12°098	- 5°050		10	+25°554	-14°502		
11	- 7°312	+35°313			9	+54°278	+17°203	65	597	10°0	9	-11°836	-19°485		9	+25°692	-34°283		
15	- 6°963	+ 8°102			9	+55°221	+15°504	65	598	10°0	10	-11°718	- 9°231		9	+25°729	-56°142		
11	- 4°784	+13°095	65	573	11	+55°645	+21°598	65	599	9°5	15	- 9°886	-28°972		12	+25°803	-30°363	66	528
11	- 4°768	+13°025			9	+56°986	+ 4°483	65	600	10°0	10	- 9°665	-38°365		9	+26°038	-32°787		10°0
9	- 4°690	+63°920			19	+59°567	+20°618	65	601	8°9	14	- 9°091	-57°957	66	510	9°7	31	+27°623	-15°721
9	- 3°718	+ 5°020			10	+60°930	+19°456	65	602	9°3	18	- 7°598	- 1°260	66	511	9°6	12	+27°794	-25°145
9	- 1°743	+ 9°572			9	+63°154	+ 9°294	65	604	9°6	9	- 6°148	-27°896		9	+28°502	-18°253	66	530
9	- 1°538	+21°205			9	+63°665	+47°498	65	603	10°0	19	- 5°866	-48°032	66	512	9°0	10	+28°544	-25°740
9	- 0°890	+38°140			19	-62°765	- 0°871	65	554	9°4	10	- 4°264	-10°394		9	+29°147	-13°454		
	61					121						181				241			
9	+ 2°112	+ 6°368			11	-62°015	-21°625				12	- 4°222	-31°755		12	+29°467	-11°880		
22	+ 3°204	+56°787	65	574	10	-60°755	-60°452	66	495	9°4	18	- 3°788	- 0°803	66	513	9°7	10	+29°997	-28°611
9	+ 4°132	+58°701	65	575	11	-60°285	-44°060	66	496	9°9	9	- 2°789	- 6°794		22	+30°744	-58°002	66	531
9	+ 4°172	+44°761			9	-59°827	- 3°641				11	- 2°664	-30°285		9	+31°825	-49°324		9°1
9	+ 5°377	+ 0°603			13	-59°276	-18°471	66	497	9°8	9	- 1°902	-35°052		20	+31°937	-38°288	66	532
9	+ 5°896	+ 0°440			9	-50°984	-53°468				9	- 0°588	- 7°956		9	+33°497	- 6°337		
9	+ 6°317	+52°412			9	-52°334	-15°524				11	+ 1°718	-52°729		9	+33°815	-58°653		
9	+ 6°602	+33°256			20	-48°522	-31°647	66	498	9°1	17	+ 2°022	- 5°896		9	+35°731	-25°695		
9	+ 7°084	+31°158			9	-45°145	-23°596				10	+ 2°392	-10°022		13	+35°935	- 6°600	66	533
9	+ 7°393	+11°929			15	-44°575	- 6°979	66	499	10°0	18	+ 2°656	- 7°860	66	514	9°0	13	+37°495	-56°276
	71					131						191				251			
11	+ 7°514	+19°185	65	577	9	-44°428	-36°400				13	+ 3°509	-19°249		10	+37°773	-15°817		
9	+ 7°819	+58°101	65	576	9	-43°506	-24°571				13	+ 4°397	-19°710		9	+39°785	-46°294		
9	+ 9°821	+14°408			9	-43°268	-24°151				12	+ 5°315	-18°571		9	+40°533	-33°393		
9	+ 9°865	+41°625			9	-43°010	- 5°943				9	+ 5°560	-10°676		9	+41°411	-19°001		
14	+10°841	+43°299	65	578	10	-42°888	-29°344				9	+ 6°154	-14°503		10	+42°739	-32°017		
9	+11°286	+20°688			11	-40°270	-34°619				19	+ 6°448	-17°800	66	515	9°9	14	+43°127	-26°489
9	+12°059	+11°549			17	-39°716	-56°124	66	500	9°1	9	+ 6°957	- 0°728		10	+43°554	-64°754	67	593
9	+12°333	+15°607			10	-37°438	-31°797				24	+ 7°522	- 0°442	66	516	8°4	11	+45°347	-22°803
9	+13°969	+12°315			15	-32°924	-41°456	66	501	9°9	9	+ 9°502	-31°107		9	+46°073	-60°993	66	537
9	+15°527	+32°001			9	-32°890	-26°902				9	+ 9°907	-16°046		10	+46°860	-51°334	66	538
	81					141						201				261			
12	+17°182	+62°117	64	536	10	-32°089	-23°803				19	+10°291	-46°342	66	518	9°4	11	+48°692	-31°766
9	+17°501	+31°119			11	-31°820	- 8°163				14	+10°602	-45°618	66	519	9°7	9	+49°559	-54°631
9	+18°488	+50°803	65	579	18	-31°044	- 0°887	66	502	9°4	14	+10°603	-14°720	66	517	10°0	9	+50°025	-28°019
9	+22°273	+53°767	65	580	10	-29°362	-12°009				10	+11°165	- 6°198		13	+53°200	-17°520	66	543
10	+23°610	+28°451	65	581	21	-28°944	-10°805	66	503	9°4	9	+11°683	- 3°270		10	+54°079	-39°216		
9	+24°744	+18°346	65	582	9	-28°512	-28°731				19	+11°727	-22°589	66	520	9°3	10	+54°137	-19°343
9	+25°619	+41°317	65	584	10	-28°346	-12°283				10	+11°972	- 6°706		22	+54°438	- 2°632	66	541
9	+25°883	+58°343	65	583	10	-27°820	-41°200				10	+12°287	-46°042		11	+56°946	-40°672	66	545
9	+25°995	+27°807			38	-26°267	-39°280	66	504	7°7	17	+12°355	-22°753	66	521	9°0	20	+56°979	-38°319
9	+26°504	+62°015	61	543	32	-26°004	- 8°441	66	505	8°4	28	+12°518	-30°566	66	522	8°7	11	+58°227	-51°038
	91					151						211				271			
9	+27°080	+11°721			9	-25°962	- 0°325				24	+13°897	-21°368	66	523	9°0	9	+59°264	- 5°787
9	+27°663	+64°856	64	545	14	-25°822	-40°476	66	506	9°6	9	+14°586	-42°768		14	+59°575	-43°052	66	548
9	+28°353	+ 3°749			9	-25°380	-51°769				9	+14°679	- 9°723		9	+60°045	-35°281	66	549
14	+31°726	+29°120	65	585	10	-24°436	-23°361				14	+15°365	-35°339	66	524	9°8	10	+60°265	-58°296
10	+32°146	+21°733	65	586	9	-24°259	-22°933				10	+15°413	-22°093		9	+60°567	-18°145	66	547
9	+32°834	+13°082			14	-21°474	-21°038				10	+15°719	- 9°354		10	+61°174	-54°453	66	551
9	+33°883	+28°331	65	587	9	-21°446	-44°654				11	+15°829	-42°320		10	+63°142	-53°449	66	553
9	+34°148	+48°904			10	-20°656	- 6°900				9	+16°076	- 0°813		13	+64°276	-22°979	66	552
14	+35°217	+61°658	64	551	10	-20°531	-46°450				11	+16°597	-32°271		9	+63°018	-59°244	66	554
9	+35°809	+10°633			9	-19°061	-12°051				13	+17°283	- 7°234						
	101					161						221							
16	+37°185	+ 1°836	65	589	9	-17°783	-59°559				9	+19°001	-48°672						
30	+37°847	+22°695	65	588	9	-16°807	- 5°579				13	+19°347	-56°671	66	525	9°4			
9	+40°842	+32°012			9	-15°356	- 0°433				11	+19°827	- 4°506						
20	+41°311	+16°727	65	591	40	-15°091	-15°280	66	507	7°3	9	+20°099	-15°675						
22	+41°782	+32°964	65	590	16	-15°061	-12°437	66	508	10°1	10	+20°516	-43°919						
9	+42°578	+40°500	65	592	10	-14°690	-48°998				18	+21°829	-37°660	66	526	9°4			
12	+45°181	+12°223	65	593	9	-13°956	-14°751				11	+23°463	-32°031						
9	+48°430	+28°160	65	594	35	-13°932	-43°531	66	509	8°5	15	+23°743	-15°349	66	527	9°7			
9	+49°017	+12°339			9	-13°057	-12°132				9	+24°098	-19°535						
9	+51°225	+54°478	65	595	9	-12°365	-19°855				9	+24°107	-47°945						

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
PLATE CENTRE.																			
6 ^h 36 ^m , - 66°.																			
Plate 151. 1892, Feb. 2.																			
PROVISIONAL CONSTANTS.																			
<i>a</i> = - 0.01152 <i>d</i> = - 0.00249																			
<i>b</i> = + 0.00224 <i>e</i> = - 0.01159																			
<i>c</i> = - 0.1387 <i>f</i> = + 0.2305																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
12	-64.527	+27.200	65	594	10.0														
10	-63.823	+53.630	65	595	10.0														
14	-62.700	+11.489																	
9	-61.834	+61.374																	
10	-60.939	+37.435																	
18	-60.068	+15.648	65	596	9.1														
10	-58.381	+ 2.652																	
13	-57.851	+16.747	65	597	10.0														
9	-57.294	+15.020																	
11	-56.852	+12.516																	
16	-56.849	+21.230	65	599	9.5														
13	-56.759	+15.134	65	598	10.0														
11	-56.105	+21.374																	
9	-54.465	+13.750																	
14	-54.161	+ 4.295	65	600	10.0														
11	-53.198	+37.201																	
22	-52.834	+20.579	65	601	8.9														
10	-51.673	+19.037																	
17	-51.392	+19.522	65	602	9.3														
11	-51.222	+13.020																	
12	-50.867	+47.683	65	603	10.0														
9	-49.939	+ 2.119																	
10	-49.884	+34.839																	
14	-49.051	+41.062	65	605	9.6														
12	-48.451	+32.493																	
15	-48.371	+ 9.581	65	604	9.6														
16	-46.547	+29.661	65	606	9.4														
21	-45.963	+24.751	65	607	8.8														
15	-45.721	+38.658	65	608	9.6														
11	-45.705	+30.881																	
12	-45.661	+25.061																	
12	-45.279	+45.661	65	609	10.0														
10	-44.574	+43.530																	
11	-41.770	+52.870																	
9	-41.242	+54.960																	
48	-39.071	+29.684	65	610	6.8														
11	-38.467	+21.659																	
13	-37.453	+61.725	64.	575	10.0														
13	-35.818	+31.252																	
12	-35.735	+45.174																	
30	-35.632	+ 2.254	65	611	8.2														
9	-34.160	+57.637																	
10	-33.642	+46.666																	
9	-33.461	+11.571																	
15	-33.094	+31.659	65	612	9.6														
11	-31.461	+ 9.904																	
10	-31.039	+ 7.428																	
18	-30.336	+40.756	65	613	9.2														
10	-29.982	+55.786																	
16	-29.813	+ 7.462	65	614	10.0														
9	-29.718	+11.830																	
11	-29.536	+16.473																	
10	-29.342	+18.897																	
11	-27.972	+43.338																	
16	-27.010	+ 0.328																	
12	-26.983	+18.585																	
12	-26.924	+14.444																	
11	-26.628	+44.678																	
41	-26.352	+45.563	65	616	8.0														
17	-25.037	+11.422	65	617	9.3														
40	-25.290	+42.437	65	618	8.0														
11	-25.241	+13.796																	
13	-24.666	+19.909																	
19	-24.447	+ 9.052	65	619	9.2														
11	-24.167	+50.669																	
14	-23.291	+41.950	65	620	9.8														
14	-23.007	+14.181																	
12	-21.459	+58.476																	
12	-19.895	+30.494																	
14	-19.577	+64.669	64	582	10.0														
14	-19.143	+21.627																	
11	-19.127	+20.835																	
9	-18.813	+24.075																	
10	-17.653	+ 1.528																	
11	-17.387	+61.948																	
14	-16.633	+16.882																	
14	-16.013	+ 3.749																	
13	-14.876	+ 3.660																	
13	-14.865	+ 8.218																	
9	-14.406	+12.603																	
13	-12.510	+ 6.466																	
13	-12.468	+57.409																	
9	-11.644	+35.139																	
10	-11.589	+56.213																	
10	-10.542	+47.622																	
16	-10.487	+21.022	65	622	9.6														
12	- 8.905	+26.124																	
24	- 8.287	+64.804	64	588	8.9														
16	- 7.581	+10.965	65	623	9.8														
9	- 6.807	+ 7.902																	
14	- 5.672	+ 0.408	65	624	10.0														
12	- 5.123	+44.022																	
14	- 4.861	+22.147	65	625	10.0														
9	- 4.671	+42.092																	
12	- 4.524	+57.589																	
9	- 2.955	+18.099																	
9	- 2.286	+42.776																	
12	- 1.264	+21.303																	
9	- 1.249	+44.381																	
9	- 1.061	+19.509																	
9	- 0.885	+24.905																	
12	- 0.626	+47.753																	
13	+ 0.673	+47.047																	
10	+ 0.816	+48.941																	
10	+ 2.797	+35.230																	
9	+ 3.110	+61.236																	
10	+ 3.223	+24.143																	
14	+ 3.284	+ 5.630	65	626	10.0														
10	+ 4.260	+ 5.589																	
11	+ 4.618	+17.833																	
9	+ 5.180	+43.265																	
20	+ 5.570	+63.285	64	595	9.1														
13	+ 5.729	+10.331																	
12	+ 8.129	+48.324																	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
32	231, -50°776	-38°368	66	544	9°1	13	291, -19°737	-53°780		10	351, +13°136	-0°033			16	411, +44°009	-24°811	66	594	8°1			
24	-50°616	-40°702	66	545	9°4	9	-19°061	-10°511		12	+13°547	-20°782			9	+44°079	-51°960						
14	-48°803	-17°974	66	547	10°0	13	-18°599	-44°257		12	+14°161	-25°219			16	+44°447	-28°202	66	595	10°0			
23	-48°547	-50°911	66	546	9°3	13	-17°509	-32°595		13	+15°411	-59°679			11	+44°886	-1°357						
14	-47°967	-35°086	66	549	10°0	13	-17°061	-43°754		18	+15°843	-31°655	66	582	9°6	19	+45°333	-36°792	66	596	9°4		
32	-47°835	-42°883	66	548	9°2	9	-15°558	-20°295		13	+15°943	-4°502	66	581	10°0	9	+45°637	-1°154					
9	-47°013	-10°733				15	-15°035	-36°864	66	568	9°6	9	+15°991	-33°495		9	+46°349	-16°169					
10	-46°863	-2°148				10	-14°832	-61°266		11	+16°413	-0°670			20	+47°366	-10°537	66	597	9°3			
28	-45°947	-57°999	66	550	9°4	9	-14°088	-38°402		15	+16°430	-64°857			14	+47°827	-25°505						
22	-45°355	-54°087	66	551	9°5	17	-13°551	-29°834	66	569	9°4	9	+16°811	-14°282		9	+50°103	-5°534					
15	241 -45°069	-59°256				9	301 -13°290	-17°517		13	361 +17°613	-11°152			22	421 +50°227	-59°351	66	598	9°0			
11	-44°736	-3°440				10	-12°834	-35°184		11	+20°304	-27°138			11	+50°939	-38°625						
20	-44°729	-22°493	66	552	9°3	11	-12°321	-47°332		12	+21°546	-44°426			18	+50°964	-1°879	65	651	9°4			
11	-44°518	-34°905				28	12°092 -1°280		65	621	8°9	9	+23°257	-23°677		12	+51°429	-19°740					
11	-44°306	-23°587				9	-11°813	-9°766		24	+23°539	-58°821	66	583	9°3	10	+51°508	-17°773					
9	-44°181	-61°586				13	-11°723	-50°640		9	+23°569	-15°597			12	+51°644	-7°650						
15	-44°038	-42°800				12	-11°256	-42°874		9	+23°915	-61°440			9	+52°090	-31°525						
24	-43°471	-52°930	66	553	9°4	9	-11°172	-37°161		15	+24°889	-38°690	66	584	10°0	14	+52°225	-10°399					
17	-43°136	-58°710	66	554	10°0	20	-10°693	-53°424	66	570	9°5	11	+25°703	-6°095		11	+52°311	-18°686					
15	-42°484	-12°194	66	555	10°0	13	-10°554	-58°189		15	+25°761	-21°375			24	+53°335	-31°867	66	599	9°3			
9	251 -42°294	-52°882				11	311 -9°401	-9°431		16	371 +26°623	-40°942	66	585	10°0	42	431 +53°433	-46°944	66	600	8°8		
9	-42°035	-9°813				15	-8°888	-14°533	66	571	10°0	17	26°690 -36°404		66	586	9°5	13	+53°645	-51°394			
11	-40°474	-37°651				10	-8°185	-1°430		9	+27°050	-55°446			15	+53°701	-50°815						
11	-38°075	-27°589				13	-8°133	-45°482		17	+27°942	-58°398	66	587	10°0	14	+54°731	-9°893					
24	37°703 -35°175		66	556	9°2	12	-7°240	-22°750		9	+28°030	-9°864			11	+55°491	-8°823						
9	-37°592	-44°246				18	-7°144	-31°123	66	572	9°6	15	+28°497	-13°994		24	+55°625	-62°504	66	601	9°3		
10	-37°560	-36°375				15	-6°677	-8°074	66	573	10°0	9	+28°847	-20°186		13	+56°929	-41°812					
10	-36°134	-26°683				10	-6°168	-44°242		12	+29°020	-32°684			10	+58°255	-6°345						
10	-34°962	-16°554				9	-5°800	-3°445		9	+29°462	-55°584			21	+58°634	-15°350	66	602	9°3			
12	-34°556	-26°271				12	-5°282	-30°349		13	+29°914	-48°714	66	588	10°0	16	+58°782	-1°223					
9	-33°271	-38°655				9	-4°430	-2°702		10	381 +30°150	-22°307			15	441 +59°886	-11°406						
11	-32°840	-3°114				11	-3°892	-32°275		15	+30°413	-61°904			9	+60°163	-19°174						
9	-32°641	-10°582				23	-3°728	-44°797	66	574	9°2	9	+31°112	-29°272		10	+60°206	-24°873					
10	-31°745	-9°091				11	-2°792	-39°870		14	+31°798	-64°891			9	+62°777	-43°097						
9	-30°650	-33°847				11	-2°205	-33°365		9	+31°972	-58°877			14	+64°151	-14°552						
11	-30°003	-35°819				12	-1°435	-13°986		9	+33°626	-41°904			15	+64°902	-34°298	66	603	9°7			
40	-29°912	-64°276	67	610	8°9	18	-1°334	-37°020	66	575	9°3	12	+34°170	-33°879									
13	-29°710	-37°659	66	557	10°0	14	-1°079	-39°252		14	+34°275	-21°957											
14	-29°471	-28°026	66	559	9°8	9	-0°914	-47°838		14	+34°383	-24°441											
14	-29°430	-0°442	65	615	10°0	9	-0°128	-33°163		26	+34°691	-51°999	66	589	9°3								
33	271 -29°330	-48°922	66	558	8°8	10	331 +0°608	-42°613		9	391 +35°331	-33°574											
13	-29°015	-0°900				9	+0°895	-36°075		10	+35°474	-0°118											
15	-28°760	-7°251	66	560	10°0	9	+1°398	-34°835		19	+35°656	-61°635	66	590	9°3								
15	-27°770	-18°926	66	561	10°0	9	+1°705	-46°351		15	+36°175	-58°652											
17	-27°144	-17°952	66	562	9°7	11	+3°521	-2°834		11	+36°207	-5°816											
16	-26°882	-33°632	66	563	9°8	11	+6°199	-63°606		9	+36°258	-21°051											
10	-26°198	-35°181				12	+6°830	-37°314		9	+36°533	-20°823											
10	-25°330	-26°731				16	+8°644	-24°886	66	576	9°5	32	+36°970	-0°235	65	647	8°7						
15	-24°875	-31°817	66	565	10°0	14	+8°822	-56°887		9	+36°973	-24°935											
14	-24°841	-51°752				18	+9°385	-62°946	67	638	9°6	10	+37°402	-6°662									
15	281 -24°825	-28°715	66	564	10°0	14	341 +9°578	-44°440		13	401 +38°642	-45°158	66	591	10°0								
12	-24°055	-21°991				13	+9°892	-29°113		11	+39°385	-12°124											
18	-23°637	-47°966	66	566	9°6	10	+10°408	-39°873		12	+39°527	-33°446											
11	-23°448	-19°111				12	+10°918	-27°171		13	+39°911	-11°147											
9	-23°062	-10°443				20	11°012 -17°581		66	577	9°3	15	+41°827	-29°140	66	592	10°0						
10	-22°988	-15°540				11	+11°214	-61°245	66	578	10°0	19	42°771 -7°652		66	593	9°2						
15	-20°751	-12°154	66	567	9°4	10	+11°956	-1°248		9	+43°179	-49°872											
14	-20°668	-12°144				20	+12°097	-44°797	66	580	9°4	9	+43°197	-34°226									
10	-20°336	-45°284				18	+12°234	-34°766	66	579	9°4	13	+43°727	-28°190									
11	-20°274	-18°228				9	+12°797	-14°383		40	+43°849	-24°856	66	594	8°1								

PLATE CENTRE.					51					111					171				
6h 54m, - 66°.																			
Plate 1492. 1896, March 5.																			
PROVISIONAL CONSTANTS.																			
a = - .01130		d = + .00048																	
b. = - .00046		e = - .01139																	
c = - .0995		f = - .0763																	
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
10	-63°312	+ 5°257			9	-40°865	+54°080			9	- 1°384	+20°726			9	+43°772	+11°330		
9	-62°626	+ 7°108			9	-39°627	+ 6°419			12	+ 2°308	+26°587			10	+46°200	+ 9°579		
18	-62°583	+49°112	65	649	9	-37°556	+39°879			14	+ 2°337	+44°926	65	671	10	+46°312	+60°835		
12	-62°469	+47°118			10	-37°274	+14°872			13	+ 2°994	+56°175			10	+46°511	+42°528		
12	-62°374	+26°463			12	-36°804	+47°002			11	+ 3°880	+53°531			9	+46°521	+19°089		
10	-62°202	+34°477			9	-36°587	+ 5°254			9	+ 3°884	+33°992			11	+46°588	+57°161		
21	-61°738	+31°208	65	650	21	-35°484	+ 3°506	65	658	22	+ 4°023	+47°528	65	672	9	+46°827	+31°096		
11	-61°134	+20°113			9	-35°157	+ 5°148			10	+ 5°434	+50°732			14	+47°190	+60°041		
14	-60°085	+46°964	65	652	11	-34°907	+54°183			9	+ 5°489	+22°311			9	+47°314	+31°685		
10	-59°790	+45°382			18	-32°103	+ 0°103	65	659	9	+ 5°544	+21°592			14	+47°485	+32°190		
11					61					121					181				
13	-58°542	+59°745			9	-31°661	+23°872			12	+ 6°341	+34°334			14	+47°495	+42°116		
32	-57°821	+63°682	64	618	15	-30°853	+44°278	65	660	34	+ 7°978	+11°241	65	673	10	+47°748	+21°571		
12	-57°733	+11°205			21	-30°651	+56°563	65	661	13	+ 8°248	+59°871			13	+47°823	+13°352		
11	-57°421	+12°914			11	-30°487	+35°601			15	+ 8°421	+52°771			12	+48°162	+61°137		
9	-57°034	+15°701			12	-30°247	+46°066			9	+ 8°431	+17°458			19	+48°778	+35°029		
9	-56°490	+28°962			10	-29°854	+ 1°391			15	+ 9°255	+60°265			10	+50°325	+24°950		
11	-56°272	+21°349			9	-28°976	+ 1°612			11	+ 9°514	+19°234			15	+50°565	+32°378		
13	-56°173	+ 9°677			9	-28°213	+18°839			10	+ 9°650	+55°055			13	+50°859	+42°749		
11	-55°438	+ 3°249			9	-25°940	+45°868			11	+10°547	+27°457			11	+50°922	+58°430		
11	-53°442	+22°725			10	-25°461	+47°733			18	+10°612	+22°703	65	674	9	+51°021	+33°690		
21					71					131					191				
9	-52°606	+ 0°952			15	-22°916	+60°556			10	+11°540	+10°263			12	+51°087	+35°792		
9	-52°437	+33°157			11	-22°818	+ 7°774			13	+11°879	+18°250	65	675	9	+51°208	+20°413		
9	-52°430	+15°658			9	-21°211	+44°016			10	+12°385	+52°966			11	+51°736	+34°166		
10	-52°222	+45°445			11	-20°996	+ 2°562			17	+13°289	+16°054	65	676	13	+52°261	+57°230		
10	-50°463	+59°573			9	-19°267	+29°494			9	+13°847	+47°935			12	+52°493	+56°812		
12	-50°279	+ 2°005			11	-19°177	+36°777			9	+16°187	+ 3°709			18	+52°520	+33°652		
15	-49°824	+44°941	65	653	16	-18°348	+23°420	65	662	20	+16°351	+25°609	65	677	9	+53°518	+13°767		
12	-49°300	+ 5°259			15	-17°365	+38°445			11	+16°375	+40°142			12	+54°654	+41°641		
11	-49°264	+36°879			15	-16°942	+38°610			10	+17°074	+59°922			9	+56°866	+ 6°876		
10	-48°871	+22°739			9	-16°781	+55°448			22	+17°238	+60°949	64	640	12	+57°336	+51°176		
31					81					141					201				
12	-48°776	+25°684			14	-16°664	+54°781			18	+18°105	+ 6°746	65	678	9	+57°464	+10°505		
9	-48°505	+ 2°782			9	-16°493	+30°100			12	+20°433	+51°456			12	+58°147	+ 5°216		
14	-48°448	+44°360	65	654	12	-16°272	+61°753			10	+20°813	+41°034			9	+59°232	+ 9°177		
9	-47°920	+23°600			40	-15°817	+36°625	65	663	12	+21°884	+17°829			12	+59°937	+ 6°002		
15	-47°428	+28°767	65	655	10	-13°527	+36°847			11	+24°151	+50°734			13	+60°360	+63°588		
9	-46°406	+36°704			32	-13°332	+52°610	65	664	12	+24°285	+ 9°849			17	+60°513	+26°221		
13	-46°261	+46°482			14	-13°218	+33°370			14	+25°230	+21°447	65	679	9	+60°955	+42°638		
28	-45°977	+61°656	64	623	19	-13°152	+62°535	64	628	10	+26°477	+57°224			9	+61°172	+43°497		
10	-45°948	+50°901			15	-12°821	+42°450	65	665	10	+27°084	+59°139			14	+61°212	+39°653		
9	-45°817	+58°779			9	-12°656	+ 0°036			9	+27°167	+ 3°158			12	+61°606	+60°844		
41					91					151					211				
14	-44°830	+61°494			9	-11°990	+34°809			10	+27°926	+52°816			15	+62°093	+49°210		
11	-44°830	+60°134			12	-10°800	+32°801			12	+28°281	+15°331	65	680	14	+63°803	+58°521		
22	-44°144	+32°287	65	656	38	- 9°317	+42°690	65	666	9	+29°739	+31°476			10	+63°990	+37°184		
9	-43°001	+23°557			10	- 8°814	+33°116			20	+29°778	+56°036	65	681	15	+64°111	+ 5°190		
11	-42°937	+53°002			10	- 8°707	+28°295			12	+34°401	+16°516			18	+64°149	+37°212		
12	-42°773	+48°162			14	- 8°250	+25°467	65	667	28	+34°798	+16°399	65	682	14	-64°782	-28°711		
19	-42°315	+22°432	65	657	12	- 7°865	+42°869			11	+35°979	+48°572			9	-63°524	-52°433		
11	-42°311	+35°479			12	- 7°474	+60°099			19	+36°202	+53°668	65	683	18	-63°306	-37°230		
13	-42°126	+16°060			12	- 7°434	+25°903			13	+37°077	+37°557			20	-63°082	-10°904		
9	-40°926	+ 9°231			10	- 6°797	+ 6°189			15	+37°356	+ 3°062	65	684	12	-61°604	-25°805		
					101					161					221				
					18	- 6°375	+47°431	65	668	9	+38°158	+43°236			18	-60°089	- 2°005		
					30	- 6°274	+16°363	65	669	10	+38°228	+24°901			13	-59°010	- 7°713		
					10	- 6°272	+47°418			30	+38°331	+18°682	65	685	11	-58°462	-17°822		
					11	- 4°702	+ 0°968			12	+38°597	+38°435			11	-58°389	-19°768		
					10	- 3°983	+22°719			9	+40°491	+54°948			12	-58°239	-10°434		
					10	- 3°801	+13°068			11	+41°407	+30°716			12	-57°592	-18°661		
					9	- 3°481	+48°370			12	+41°714	+43°635			11	-57°580	-38°648		
					26	- 3°322	+18°108	65	670	10	+41°895	+60°942			9	-57°547	-56°326		
					12	- 2°907	+61°039			36	+42°426	+26°080	65	686	9	-56°944	-31°597		
					11	- 1°804	+46°054			13	+42°674	+35°955			15	-56°885	-59°380		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231					291					351					411			
9	-56°570	-30°253			11	-24°232	-17°083			11	+4°412	-18°980			10	+29°848	-11°765		
9	-56°325	-55°173			11	-23°857	-43°900			12	+4°422	-15°649			16	+30°496	-6°265	66°	635
14	-55°788	-9°715			9	-23°276	-34°780			20	+5°174	-36°114	66°	624	18	+32°631	-58°319	66°	636
22	-55°670	-31°751	66°	599	9	-23°148	-31°287			12	+6°320	-39°205			10	+32°979	-23°975		9°2
12	-55°106	-8°625			11	-22°514	-47°902			13	+6°869	-29°732			18	+84°006	-17°116	66°	637
25	-54°528	-46°788	66°	600	9	-22°436	-34°181			10	+7°137	-46°907			9	+34°465	-36°958		
12	-54°014	-50°635			12	-22°181	-39°107			18	+7°162	-53°539	66°	625	10	+35°398	-37°418		
11	-52°522	-5°967			18	-22°046	-52°038	66°	609	10	+7°433	-1°588			9	+35°674	-46°444		
14	-52°355	-0°836			12	-21°911	-46°326			9	+7°495	-48°271			13	+35°770	-25°162		
18	-51°513	-14°894	66°	602	15	-19°257	-44°370	66°	610	10	+7°922	-37°777			12	+36°118	-22°039		
	241					301					361					421			
12	-51°409	-41°427			12	-18°928	-11°125	66°	611	9	+8°942	-58°524			9	+36°854	-21°425		
18	-51°280	-62°139	66°	601	12	-18°160	-41°091			15	+9°703	-21°467	66°	626	20	+37°125	-61°872	66°	639
13	-50°556	-10°898			12	-17°883	-60°069			10	+9°836	-38°088			11	+37°324	-48°845		9°2
12	-49°706	-18°620			9	-17°628	-22°262			10	+10°113	-34°847			11	+37°713	-53°900		
9	-49°596	-18°590			10	-17°375	-33°566			13	+11°019	-26°201			15	+37°770	-4°772	66°	638
11	-49°290	-24°281			10	-17°365	-44°804			15	+11°038	-8°841	66°	627	11	+38°329	-50°827		
9	-48°746	-8°599			9	-17°100	-25°256			11	+12°080	-45°505			9	+38°733	-64°390		
10	-48°678	-26°580			10	-17°012	-8°720			11	+12°314	-50°064			13	+40°066	-24°667		
10	-47°632	-17°063			16	-16°561	-60°441	66°	612	9	+12°464	-59°549			12	+40°512	-42°751	66°	640
9	-47°113	-62°877			13	-16°172	-50°646		9°6	11	+12°555	-51°383			18	+41°218	-40°238	66°	641
	251					311					371					431			
11	-46°949	-60°209			9	-16°055	-19°691			11	+14°009	-56°349			9	+42°126	-49°086		
10	-46°430	-21°795			10	-15°560	-24°036			10	+14°161	-29°760			13	+42°476	-44°406		
14	-46°098	-13°721			11	-14°951	-27°749			11	+14°338	-48°600			10	+42°573	-35°539		
10	-45°506	-42°285			18	-14°490	-60°711	66°	613	15	+14°721	-29°415	66°	628	9	+43°123	-63°416		
10	-44°038	-22°738			12	-14°387	-9°466			12	+15°441	-39°257			12	+43°548	-9°407		
16	-43°968	-33°371	66°	603	10	-14°271	-35°533			11	+15°477	-53°145			20	+43°732	-1°063	65°	687
16	-43°681	-6°785	66°	604	20	-13°843	-35°817	66°	614	16	+15°670	-6°554	66°	629	12	+43°906	-55°594		9°2
11	-42°802	-10°476			15	-13°432	-53°553	66°	615	11	+16°184	-46°065			12	+43°908	-43°767		
12	-42°409	-23°377			11	-11°865	-58°056			14	+16°576	-9°874	66°	630	13	+44°325	-0°839		
11	-41°339	-36°642			13	-11°847	-55°992			9	+17°137	-59°617			9	+44°574	-46°813		
	261					321					381					441			
13	-40°693	-64°717			10	-11°485	-58°486			10	+17°219	-63°588			11	+44°945	-25°759		
16	-39°818	-13°404			9	-10°715	-6°412			14	+17°723	-17°886			15	+45°594	-10°404	66°	642
10	-38°786	-64°238			26	-10°489	-15°073	66°	616	12	+17°899	-16°648			13	+45°725	-12°448		9°3
10	-38°324	-32°438			14	-9°918	-40°708	66°	617	11	+18°436	-8°715			13	+47°279	-49°399	66°	643
9	-38°311	-12°145			11	-9°881	-52°095			14	+18°492	-34°341			13	+48°020	-26°721		
12	-37°101	-59°506			24	-9°775	-42°340	66°	618	20	+18°681	-54°851	66°	631	18	+48°098	-44°126	66°	644
9	-36°549	-58°664			9	-9°763	-54°066			15	+19°102	-46°553			9	+48°587	-45°360		9°2
11	-36°326	-5°025			11	-8°415	-56°966			13	+19°288	-8°730			18	+48°821	-48°670	66°	645
9	-35°852	-18°744			15	-8°364	-42°228			12	+19°382	-8°343			9	+49°632	-16°258		
11	-34°622	-27°572			9	-8°035	-42°556	66°	619	22	+19°630	-63°198	67°	679	12	+49°717	-4°115		
	271					331					391					451			
12	-34°416	-49°277			9	-7°667	-34°173			15	+19°716	-0°579			10	+50°382	-42°465		
9	-34°129	-64°095			12	-5°749	-32°785			12	+20°809	-32°166			9	+51°189	-1°665		
26	-32°838	-2°304	66°	605	22	-5°560	-13°047	66°	620	10	+21°085	-45°729			10	+51°695	-24°594	66°	642
9	-32°769	-28°229			15	-5°445	-41°115	66°	621	12	+21°606	-63°858			9	+51°698	-45°230		
11	-32°016	-20°165			9	-5°073	-59°800			10	+21°768	-0°744			9	+51°878	-4°751		
13	-29°531	-21°489			13	-4°731	-27°224			26	+22°457	-51°699	66°	632	32	+54°472	-45°849	66°	646
12	-28°954	-10°986			12	-4°039	-23°239			11	+22°460	-59°872	66°	633	9	+54°724	-53°568		8°3
10	-27°967	-21°949			13	-3°742	-62°573			9	+22°668	-50°927			13	+54°734	-7°287		
10	-27°642	-28°966			9	-2°474	-41°284			11	+22°859	-37°865			11	+55°223	-56°251		
13	-27°634	-64°089	67°	665	12	-2°041	-63°962			14	+24°136	-5°271	66°	634	14	+56°239	-14°479	66°	647
	281					341					401					461			
19	-27°520	-13°445	66°	606	9	-1°653	-50°647			10	+24°562	-64°005			9	+57°709	-20°954		
15	-26°928	-63°498	67°	667	11	-0°731	-30°903			9	+25°561	-51°539			9	+57°859	-52°637		
9	-25°741	-24°795			12	-0°312	-55°225			9	+26°155	-24°024			11	+57°911	-15°778		
14	-25°352	-47°713			10	-0°065	-40°626			9	+26°603	-52°850			11	+57°984	-46°572		
10	-25°342	-47°898	66°	607	9	+0°302	-18°434			9	+27°154	-3°517			9	+58°671	-20°486		
40	-25°288	-10°676	66°	608	22	+0°370	-51°705	66°	622	9	+27°175	-1°366			9	+59°449	-12°749		
9	-25°105	-33°145			16	+1°804	-15°645	66°	623	10	+28°817	-13°468			14	+59°521	-19°606	66°	648
12	-24°511	-28°768			9	+2°366	-39°634			10	+29°197	-14°135			11	+59°639	-11°223		9°7
10	-24°316	-13°468			10	+2°943	-21°045			12	+29°305	-20°425			9	+59°895	-26°057		
10	-24°270	-12°212			11	+3°625	-61°649			12	+29°609	-42°758			14	+60°179	-18°775	66°	649

C.P.D.					C.P.D.					C.P.D.					C.P.D.								
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.				
PLATE CENTRE.																							
7h 12m, - 66°.																							
Plate 653. 1893, March II.																							
PROVISIONAL CONSTANTS.																							
a = - 0.01161 d = - 0.00044																							
b = + 0.00048 e = - 0.01140																							
c = - 0.0703 f = + 0.0001																							
To obtain standard co-ordinates, ξ, η																							
$\xi = x + ax + by + c$																							
$\eta = y + dx + ey + f$																							
9	+60°647	-11°193	66	650	9°3	16	-64°877	+34°360	65	690	9°2	13	+11°298	+4°398	65	721	9°3	13	-48°428	-28°806	66	650	9°3
18	+60°654	-29°135	66	650	9°3	11	-64°281	+12°677	65	689	9°7	10	+12°721	+31°009	65	724	9°6	10	-47°411	-40°654	66	651	9°4
16	+60°780	-41°049	66	651	9°4	11	-62°920	+31°840	65	691	9°7	12	+16°205	+2°706	65	725	9°6	11	-43°147	-54°835	66	652	9°3
10	+60°883	-13°781				14	-61°044	+33°260	65	692	9°2	9	+19°572	+61°587				14	-42°911	-18°566	66	653	9°2
9	+60°946	-11°257				9	-55°431	+63°701	64	659	9°7	10	+20°725	+23°940	65	728	9°0	10	-42°304	-18°853			
11	+61°180	-18°255				11	-52°842	+39°889	65	694	9°5	10	+15°302	+53°275				9	-39°871	-16°587			
15	+64°037	-55°533	66	652	9°3	10	-52°655	+49°506	65	696	69°	12	+15°566	+25°305	65	724	9°6	9	-39°391	-18°933			
9	+64°858	-13°303				14	-52°562	+26°402	65	693	9°3	12	+16°205	+2°706	65	725	9°6	11	-36°001	-58°790	66	654	9°2
9	+64°925	-19°387				11	-51°654	+6°206	65	695	9°7	9	+19°572	+61°587				10	-33°529	-31°142			
						10	-51°623	+58°882	64	661	9°5	10	+20°725	+23°940				26	-31°639	-52°286	66	655	8°3
						11	-49°721	+37°641	65	697	9°2	9	+21°931	+54°864				9	-30°188	-22°523			
						13	-47°455	+5°687	65	698	9°4	10	+24°135	+47°871				10	-28°055	-15°163	66	656	9°7
						9	-40°856	+15°009				12	+25°476	+61°350	64	694	9°3	9	-27°075	-23°093			
						16	-40°817	+49°679	65	699	9°2	10	+27°594	+37°550	65	728	9°0	9	-25°961	-5°495			
						12	-38°064	+43°678	65	700	9°6	26	+27°764	+47°918	65	728	9°0	12	-20°869	-33°656	66	657	9°5
						10	-36°817	+14°453				10	+28°036	+17°336	65	729	9°7	9	-20°665	-54°796			
						15	-35°023	+57°797	65	701	9°4	9	+28°098	+12°007				9	-19°583	-36°062			
						10	-33°650	+64°980	64	669	9°6	10	+28°756	+43°474	65	730	9°7	10	-19°283	-16°737			
						15	-31°075	+5°598	65	702	9°3	14	+28°975	+18°326	65	731	9°5	9	-13°930	-52°067			
						10	-30°489	+56°986	65	704	9°7	11	+29°243	+24°656				13	-10°923	-50°453	66	658	9°1
						18	-30°444	+37°549	65	703	9°3	13	+29°654	+41°667	65	732	9°6	9	-10°446	-14°772			
						10	-30°052	+32°305				12	+30°198	+24°121	65	733	9°6	9	-10°263	-20°876			
						11	-29°863	+47°357	65	705	9°7	17	+30°366	+6°080	65	734	9°2	9	-9°705	-1°745			
						10	-29°665	+52°552	65	707	9°7	12	+31°602	+37°287	65	735	9°4	19	-8°479	-9°422	66	659	8°8
						11	-29°508	+27°462	65	706	9°7	16	+32°537	+46°486	65	736	9°3	12	-7°454	-58°835	66	660	9°4
						10	-29°498	+17°049				22	+33°596	+58°400	64	698	9°0	10	-6°975	-64°067	67	718	9°6
						10	-26°403	+30°955				11	+34°196	+52°582	65	737	9°7	27	-6°866	-54°532	66	661	8°3
						9	-23°862	+49°810				15	+36°620	+31°840	65	738	9°2	19	-6°102	-66°583	66	662	8°8
						9	-21°240	+57°490				10	+38°737	+0°772				9	-5°180	-54°979			
						11	-21°032	+23°630	65	708	9°6	9	+39°288	+11°614				10	-2°667	-29°610			
						10	-20°138	+7°274	65	709	9°7	14	+39°506	+9°382	65	739	9°5	10	-1°434	-21°590			
						10	-16°375	+11°429	65	710	9°7	19	+40°103	+20°656	65	740	9°0	13	+1°247	-11°457	66	663	9°3
						9	-15°465	+28°882				16	+41°257	+57°862	64	704	9°1	10	+5°478	-17°679	66	664	9°6
						18	-14°770	+10°890	65	711	9°2	11	+41°538	+11°287	65	741	9°7	9	+5°531	-55°507			
						19	-12°444	+34°842	65	712	9°2	10	+41°636	+51°754				9	+5°689	-15°369			
						13	-12°390	+28°554	65	713	9°7	10	+45°420	+11°046				9	+6°160	-55°417			
						28	-9°858	+24°757	65	714	8°9	13	+47°156	+5°241	65	742	9°3	9	+7°784	-6°297			
						9	-8°990	+24°087				20	+49°482	+6°392	65	743	9°1	9	+9°824	-20°870			
						9	-8°426	+20°480				10	+49°561	+59°350	64	707	9°7	10	+11°100	-48°235			
						11	-5°768	+59°466	64	681	9°7	10	+51°218	+12°396				9	+14°276	-37°141			
						14	-5°034	+40°087	65	715	9°6	13	+51°337	+31°454	65	744	9°5	9	+14°284	-43°144			
						9	-4°630	+24°606				10	+52°440	+56°738	65	745	9°6	11	+14°388	-7°370	66	665	9°7
						10	-4°186	+16°579	65	716	9°7	12	+52°456	+16°130	65	746	9°5	11	+15°630	-11°807	66	666	9°1
						15	-3°284	+47°275	65	717	9°3	24	+56°601	+31°554	65	747	9°1	11	+15°682	-7°772			
						11	-2°093	+54°306				14	+58°700	+41°195	65	748	9°4	17	+17°485	-22°353	66	667	9°1
						9	-1°320	+25°834				12	+59°328	+6°517	65	749	9°5	13	+18°055	-47°465			
						10	-0°730	+40°522				10	+61°069	+47°599	65	750	9°4	9	+18°196	-53°449			
						14	+0°544	+37°795	65	718	9°3	11	+61°206	+49°257	65	751	9°7	19	+20°964	-1°196	65	726	8°9
						9	+1°610	+64°077				11	-64°796	-11°186	66	642	9°3	12	+21°219	-0°794	65	727	9°2
						9	+1°654	+34°468				10	-61°522	-13°225				9	+22°272	-34°708			

7h 30m, - 66°

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	171,																			
22	+24.187	-38.099	66	669	8.5	PLATE CENTRE.				II	51,				111					
9	+25.289	-55.159				7h 30m, - 66°.				9	-37.396	+5.173			9	-9.627	+64.009			
10	+26.237	-6.158	66	670	9.7	Plate 3448. 1911, Jan. 31.				9	-37.289	+29.773			15	-8.698	+14.230	65	769	
11	+27.544	-27.671	66	672	9.5	PROVISIONAL CONSTANTS.				9	-35.634	+39.853			9	-8.527	+53.323		9.6	
13	+27.695	-5.743	66	671	9.4	a = -0.01151 d = +0.00020				9	-34.649	+50.669			9	-8.414	+21.039			
						b = -0.00004 e = -0.01133				9	-33.631	+38.667			9	-7.733	+5.979			
10	+28.421	-48.258				c = -0.0147 f = +0.0053				9	-33.446	+31.783			9	-7.122	+50.650			
23	+28.655	-50.367	66	673	8.8	To obtain standard co-ordinates, ξ, η				10	-32.691	+23.726			9	-6.978	+32.458			
9	+29.137	-4.007				$\xi = x + ax + by + c$				10	-32.501	+51.668			11	-5.434	+16.011			
11	+31.074	-27.747	66	674	9.7	$\eta = y + dx + ey + f$				9	-32.349	+39.112			10	-4.787	+60.085			
13	+31.497	-63.626	66	676	9.2					13	-31.942	+30.816			13	-4.696	+58.913			
	181					16	-64.379	+4.613	65	742	9.3	23	-31.890	+15.853	65	757	8.9	10	-4.693	+29.243
15	+32.072	-24.113	66	675	9.1	9	-63.119	+10.631				10	-31.431	+12.708				10	-4.677	+18.807
9	+32.464	-14.753				11	-62.816	+56.337	65	745	9.6	9	-31.153	+58.807				9	-4.412	+21.097
9	+37.087	-52.229				9	-62.732	+10.831				14	-30.883	+21.086				18	-4.237	+35.223
10	+37.704	-13.465				10	-62.640	+29.377				26	-30.823	+53.493	65	758	8.5	9	-4.237	+32.275
13	+37.940	-18.979	66	677	9.4															
						17	-62.149	+5.925	65	743	9.1	28	-29.981	+39.127	65	759	8.8	10	-2.893	+28.175
15	+38.378	-55.508	66	678	9.1	14	-62.094	+31.067	65	744	9.5	9	-29.755	+30.873				9	-2.501	+30.469
10	+39.948	-45.374				9	-61.823	+18.531				9	-29.471	+14.007				10	-2.350	+47.627
9	+42.049	-37.729				9	-61.106	+18.255				9	-29.040	+32.123				10	-0.829	+54.329
16	+42.073	-61.301	66	680	8.8	11	-60.872	+12.045				10	-28.887	+22.496				9	-0.603	+10.238
9	+42.693	-45.229				11						71								
	191					9	-60.509	+1.884				10	-27.924	+17.633				9	+0.349	+39.474
11	+42.894	-30.161	66	679	9.7	13	-59.892	+15.857	65	746	9.5	12	-27.153	+19.695				9	+1.433	+35.341
9	+43.509	-42.038				9	-59.839	+4.092				11	-26.948	+29.736				10	+2.058	+11.552
10	+45.701	-44.362				9	-59.052	+33.723				19	-26.778	+37.930	65	760	9.4	12	+3.455	+43.879
9	+49.201	-61.586				9	-58.918	+15.805				9	-26.766	+26.933				11	+4.137	+39.945
13	+51.811	-29.083	66	681	9.2															
						9	-58.602	+56.970				11	-26.639	+33.718				10	+4.334	+64.272
10	+53.140	-7.308				24	-56.860	+31.531	65	747	9.1	10	-26.199	+41.780				22	+4.390	+36.427
12	+53.374	-47.048	66	682	9.4	10	-56.311	+10.126				9	-25.149	+36.263				9	+5.238	+11.725
14	+57.304	-9.294	66	683	9.4	16	-55.468	+41.282	65	748	9.4	11	-24.966	+25.606				9	+6.123	+38.643
11	+58.248	-57.086	66	685	9.2	9	-54.938	+14.182				9	-24.854	+56.009				10	+6.323	+60.695
14	+58.269	-52.077	66	684	9.0	21						81								
	201					9	-54.392	+1.424				10	-24.346	+45.811				9	+7.052	+52.936
10	+60.633	-7.542	66	686	8.9	9	-54.368	+47.252				9	-24.252	+56.770				11	+7.500	+62.265
9	+60.793	-30.239				16	-53.556	+47.842	65	750	9.4	9	-23.102	+48.655				10	+7.710	+17.949
10	+60.910	-3.680	65	752	9.7	14	-53.530	+49.488	65	751	9.7	32	-22.988	+36.721	65	762	8.4	19	+7.912	+16.063
10	+63.041	-53.113	66	688	9.7	9	-52.694	+19.023				10	-22.827	+19.262				17	+8.192	+49.726
28	+63.891	-22.121	66	687	7.8															
						14	-52.365	+6.742	65	749	9.5	9	-21.459	+12.899				9	+9.538	+44.153
						10	-51.432	+23.647				9	-20.747	+20.706				12	+9.954	+24.603
						9	-50.825	+31.115				12	-19.581	+9.146				13	+10.003	+24.507
						12	-50.808	+4.416				19	-18.054	+21.786	65	764	9.0	9	+10.599	+19.458
						9	-49.709	+62.910				10	-17.599	+6.021				9	+10.681	+48.705
						31						91								
						9	-48.439	+54.221				9	-17.495	+57.143				11	+10.907	+1.210
						12	-48.273	+38.005				15	-16.699	+9.024	65	765	9.7	13	+13.535	+42.948
						9	-47.856	+24.554				11	-15.664	+41.974				14	+14.189	+50.377
						28	-47.464	+43.498	65	753	8.7	9	-15.342	+45.252				9	+14.863	+18.956
						11	-47.257	+10.698				9	-14.345	+31.683				9	+14.876	+37.501
						9	-45.334	+52.287				12	-13.987	+39.345				9	+15.140	+24.374
						9	-44.613	+35.428				10	-13.964	+32.043				9	+15.551	+7.634
						9	-44.216	+27.153				9	-13.949	+41.298				10	+16.051	+29.947
						9	-43.894	+24.102				9	-13.718	+62.673				11	+16.768	+37.975
						10	-42.620	+39.290				10	-13.627	+22.818				9	+16.965	+20.419
						41						101								
						18	-42.127	+12.958	65	755	9.5	9	-13.572	+62.404				9	+17.148	+62.772
						9	-40.708	+40.800				13	-12.801	+6.836	65	766	9.7	9	+17.524	+49.616
						9	-40.587	+3.016				11	-12.695	+53.472				9	+17.735	+14.894
						10	-40.061	+10.469				9	-12.452	+23.546				11	+18.315	+42.039
						12	-39.066	+22.993				9	-12.390	+17.734				10	+18.928	+56.182
						11	-38.368	+16.961				18	-11.720	+26.356	65	767	9.4	9	+19.644	+23.352
						10	-37.857	+4.253				14	-11.447	+58.555	64	724	9.7	9	+21.651	+47.902
						17	-37.845	+1.392	65	756	9.5	15	-10.911	+55.462	65	768	9.7	19	+23.090	+32.064
						12	-37.748	+64.268				13	-9.722	+14.724				16	+23.150	+2.402
						9	-37.505	+13.938				9	-9.680	+15.953				16	+24.698	+45.187

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	171					231					291					351				
11	+25°177	+38°980			15	+60°353	+46°030	65	792	9°4	12	-33°214	-35°185		10	-4°322	-15°595			
12	+25°183	+21°086			9	+63°050	+19°457				9	-31°427	-41°582		11	-3°076	-44°746			
9	+26°030	+62°725			16	+63°881	+25°582	65	793	9°4	9	-31°417	-64°395		17	-2°740	-21°227	66	705	
9	+26°299	+64°305			9	+64°160	+18°271				12	-30°550	-30°181		9	-2°328	-21°007			
11	+26°408	+24°849			9	+64°015	+13°074				16	-29°793	-46°073	66	691	9°7	9	-1°940	-5°712	
20	+26°485	+39°549	65	779	8°9	24	-64°739	-62°137	66	680	8°8	11	-29°105	-45°577		9	-1°697	-38°423		
11	+26°753	+28°252			10	-64°668	-42°826				9	-29°030	-33°979		9	-1°605	-9°328			
10	+27°668	+59°322			9	-63°565	-49°282				9	-27°569	-50°248		9	-1°600	-42°168			
11	+28°106	+63°475			11	-62°309	-27°301				9	-26°756	-36°484		10	-1°432	-23°277			
14	+28°747	+43°994			10	-62°308	-44°972				9	-26°628	-42°255		9	-1°005	-11°126			
	181					241						301				361				
13	+28°775	+16°337			9	-57°610	-21°909				17	-26°320	-51°095	66	692	9°3	11	-0°287	-26°880	
18	+29°754	+59°364	64	733	9°1	10	-57°002	-61°902			17	-26°003	-15°083	66	693	9°2	10	+0°009	-61°179	
9	+29°804	+40°282			13	-57°542	-7°493				11	-25°114	-21°241				11	+1°304	-29°696	
10	+30°891	+19°080			18	-57°315	-29°305	66	681	9°2	10	-24°953	-5°500				11	+1°543	-29°396	
9	+31°161	+28°919			9	-56°070	-64°394				9	-24°801	-40°856				10	+1°843	-61°690	
15	+31°557	+14°768			9	-54°936	-15°546				13	-24°710	-10°116				18	+2°633	-8°140	
9	+31°633	+26°391			15	-54°470	-47°131	66	682	9°4	17	-24°165	-2°809	65	761	9°1	9	+3°075	-63°416	
9	+32°865	+41°064			9	-53°981	-4°431				9	-23°999	-51°571				12	+3°202	-1°132	
9	+33°122	+32°583			11	-53°641	-5°694				10	-23°984	-28°016				9	+3°459	-23°249	
9	+33°301	+44°286			17	-53°245	-9°161	66	683	9°4	10	-23°239	-56°773				11	+3°841	-8°243	
	191					251						311				371				
13	+34°625	+1°998			9	-52°872	-53°588				10	-22°844	-41°736				9	+4°549	-60°214	
9	+36°123	+27°747			12	-50°502	-10°476				9	-22°190	-0°514				9	+4°821	-26°742	
9	+39°671	+6°472			9	-50°306	-1°277				13	-22°089	-38°185				11	+6°361	-64°457	
9	+40°337	+62°075			10	-50°083	-37°564				11	-21°736	-38°207	66	694	9°7	26	+6°502	-58°799	
15	+40°462	+46°587	65	781	9°7	19	-50°058	-7°191	66	686	8°9	9	-21°641	-35°813		9	+7°033	-26°343		
15	+40°500	+14°146	65	782	9°7	14	-50°058	-3°313	65	752	9°7	18	-21°198	-40°396	66	696	8°9	10	+7°473	-13°653
12	+41°276	+11°607			10	-49°371	-1°010				13	-21°172	-53°159	66	695	9°7	15	+7°607	-64°825	
9	+41°352	+40°748			18	-49°245	-51°777	66	684	9°0	10	-20°705	-20°357				11	+8°075	-16°216	
22	+41°864	+85°907	65	783	8°8	18	-48°912	-56°773	66	685	9°2	9	-20°098	-11°393				9	+8°110	-39°683
15	+42°307	+22°692	65	784	9°7	12	-48°284	-29°802			11	-20°652	-14°638				9	+8°210	-21°235	
	201					261						321				381				
11	+43°065	+53°590			9	-48°150	-30°435				10	-20°335	-40°342				9	+8°319	-3°268	
9	+43°383	+47°029			9	-48°023	-47°387				20	-18°922	-3°065	65	763	8°9	16	+9°405	-52°115	
9	+43°722	+19°279			30	-45°766	-21°488	66	687	7°8	9	-18°720	-46°270				10	+11°522	-7°553	
28	+43°775	+18°307	65	785	8°4	12	-45°515	-30°743			9	-18°073	-2°139				11	+11°714	-49°069	
10	+44°161	+25°616			9	-44°974	-41°635				11	-18°020	-39°341				11	+12°507	-33°159	
10	+44°980	+13°793			9	-44°630	-25°826				17	-17°701	-49°140	66	697	9°3	9	+12°527	-29°609	
9	+45°429	+40°741			15	-44°427	-52°462	66	688	9°7	14	-16°716	-26°201	66	698	9°7	12	+13°155	-25°998	
12	+46°319	+44°554			9	-44°259	-8°980				16	-16°622	-27°293	66	699	9°7	9	+13°432	-12°754	
24	+47°352	+46°004	65	786	8°9	17	-42°609	-3°267	65	754	9°2	9	-16°163	-43°412				11	+13°516	-6°800
9	+47°987	+48°540			10	-42°011	-19°797				24	-14°294	-47°174	66	700	8°3	11	+15°058	-25°544	
	211					271						331				391				
9	+48°330	+12°414			9	-40°979	-30°821				12	-13°579	-16°393				9	+15°832	-41°553	
9	+50°762	+23°894			9	-40°940	-61°927				9	-13°552	-61°924				17	+16°388	-42°125	
10	+51°673	+24°017			9	-40°566	-40°594				9	-13°465	-59°940				12	+18°081	-10°069	
9	+52°171	+36°570			10	-39°580	-34°617				17	-12°196	-11°885	66	701	9°4	9	+18°108	-23°111	
9	+52°407	+12°129			10	-39°522	-0°100				10	-12°021	-44°514				12	+19°035	-57°386	
15	+52°613	+5°952	65	789	9°7	9	-39°481	-42°029			9	-11°966	-48°976				10	+20°460	-61°674	
15	+52°705	+9°017	65	788	9°7	9	-39°374	-8°595			13	-11°897	-24°843	66	702	9°7	16	+21°384	-5°824	
9	+53°088	+45°391			22	-38°056	-21°256	66	689	8°9	11	-11°520	-34°952				16	+21°888	-30°534	
10	+53°334	+57°680			9	-37°989	-18°230				10	-11°296	-48°975				11	+22°174	-64°322	
9	+53°827	+30°932			9	-37°603	-56°120				12	-11°179	-23°463				16	+22°305	-3°328	
	221					281						341				401				
9	+53°970	+41°873			10	-37°593	-46°247				10	-11°026	-29°801				11	+22°788	-44°718	
9	+54°576	+53°602			9	-36°967	-22°150				17	-10°105	-18°879	66	703	9°4	11	+23°270	-32°700	
9	+55°479	+43°789			9	-36°758	-21°737				11	-10°038	-34°578				9	+23°341	-26°035	
9	+55°594	+1°697			9	-36°754	-9°728				11	-9°903	-25°190				19	+23°502	-8°361	
9	+55°897	+4°829			18	-36°028	-29°104	66	690	9°0	10	-8°876	-24°099				9	+23°866	-47°459	
12	+57°425	+1°597			11	-36°026	-49°331				9	-8°622	-34°827				10	+24°210	-51°202	
15	+57°830	+4°394	65	790	9°4	13	-35°453	-44°458			11	-7°121	-37°243				11	+24°766	-10°082	
11	+58°394	+30°102			10	-34°509	-52°117				14	-6°559	-16°050	66	704	9°7	9	+25°654	-26°434	
15	+58°843	+16°484	65	791	9°4	12	-33°299	-38°799			9	-5°936	-31°236				20	+26°293	-26°084	
9	+60°277	+26°175			9	-33°260	-38°921				11	-4°752	-0°783				17	+26°398	-55°474	

ORDINATES OF STANDARD CO-ORDINATES.										ORDINATES OF STANDARD CO-ORDINATES.										
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.	
	411					471				PLATE CENTRE. 7h 48m, - 66°. Plate 4071. 1917, March 4. PROVISIONAL CONSTANTS. a = - 0.01157 d = + 0.00014 b = + 0.00001 e = - 0.01158 c = - 0.0532 f = + 0.0463 To obtain standard-co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51					
9	+26°953	-53°015			9	+58°842	-19°093			11	-26°638	+24°454			9	-25°762	+2°802			
10	+27°127	-0°744			9	+60°175	-3°010			9	-24°896	+21°390	65	804	9°7					
9	+27°711	-42°317			10	+60°604	-1°598			22	-24°648	+46°139	65	805	9°0					
12	+28°061	-38°839			10	+60°812	-4°846			10	-24°563	+16°426								
13	+28°142	-16°440			11	+61°191	-30°223	66	727 9°7											
10	+28°322	-53°819			9	+61°511	-52°235			46	-24°212	+10°201	65	806	8°1					
11	+28°458	-19°384			11	+62°034	-4°155			9	-24°166	+6°370								
12	+28°477	-2°508			11	+62°675	-13°741			18	-23°795	+15°556	65	807	9°4					
17	+29°463	-12°447	66	715 9°6	9	+63°034	-10°456			19	-23°627	+49°211	65	808	9°1					
13	+29°498	-16°028			15	+63°589	-17°577	66	728 9°5	9	-21°210	+32°518								
	421					481					61									
9	+29°713	-27°069			10	+64°922	-39°377			9	-62°048	+23°451	20	-20°682	+7°494	65	809	9°2		
9	+30°591	-28°750			11	+64°984	-26°067			10	-61°930	+57°319	20	-20°126	+31°550	65	810	9°1		
14	+31°122	-8°355								10	-61°163	+23°629	12	-18°893	+28°525	65	811	9°6		
9	+32°508	-43°520								9	-59°573	+11°831	12	-18°555	+3°120					
9	+33°285	-19°062								9	-59°510	+30°675	9	-18°512	+13°355					
11	+33°335	-35°797								15	-59°050	+8°755	65	788	9°7	15	-17°865	+38°387	65	813 9°6
11	+33°380	-34°120								14	-58°927	+5°687	65	789	9°7	13	-17°801	+29°238	65	812 9°6
10	+33°646	-28°224								9	-57°953	+5°911				9	-17°282	+45°303		
9	+33°685	-42°967								11	-55°644	+1°646				11	-16°878	+42°705		
16	+33°725	-0°703	65	780 9°7						10	-55°565	+4°796				9	-16°847	+1°461		
	431										11						71			
11	+34°083	-51°550								11	-54°891	+30°186				10	-16°397	+31°481		
12	+35°133	-57°436								15	-54°135	+46°808	65	792 9°4		9	-15°988	+22°383		
9	+36°476	-36°701								12	-53°816	+1°688				10	-15°504	+15°624		
14	+36°524	-42°736								20	-53°613	+4°496	65	790 9°4		9	-15°395	+53°297		
18	+36°602	-47°986	66	716 9°4						18	-53°478	+16°640	65	791 9°4		14	-15°292	+7°220	65	814 9°7
10	+37°340	-39°073								9	-52°760	+26°398				14	-14°846	+38°247	65	815 9°5
9	+37°866	-9°321								18	-49°090	+26°074	65	793 9°4		17	-13°654	+16°240	65	816 9°4
9	+38°019	-22°615								10	-48°885	+19°961				19	-13°492	+30°308	65	817 9°4
9	+38°894	-32°760								9	-48°299	+18°791				10	-10°022	+6°268	65	818 9°7
10	+39°174	-46°408								9	-47°672	+51°847				11	-9°649	+46°316	65	819 9°7
	441										21						81			
9	+39°403	-52°821								10	-47°515	+14°234				17	-9°198	+11°488	65	820 9°4
9	+39°936	-42°484								11	-46°566	+57°465				10	-8°840	+57°957		
11	+40°372	-4°809								9	-46°110	+0°785				9	-8°647	+30°069		
10	+41°691	-18°316								10	-45°902	+63°917				11	-7°805	+53°292	65	821 9°7
12	+42°117	-31°856								17	-45°598	+1°974	65	794 9°6		12	-7°379	+55°624	65	822 9°7
19	+43°136	-43°244	66	717 9°0						9	-45°570	+5°492				9	-7°220	+17°781		
12	+45°033	-0°223								15	-44°860	+51°350	65	795 9°3		9	-6°825	+61°871		
9	+46°848	-14°436								9	-44°791	+7°243				9	-6°463	+3°012		
16	+47°042	-14°781	66	718 9°4						35	-43°340	+26°662	65	796 8°4		9	-3°218	+16°034		
9	+47°126	-15°240								32	-42°627	+43°112	65	797 8°8		9	-1°502	+59°019		
	451										31						91			
9	+47°724	-0°331								9	-41°612	+43°682				11	+1°055	+6°743		
17	+48°338	-59°344	66	720 9°4						9	-40°694	+17°300				10	+1°059	+58°639		
19	+48°637	-17°458	66	719 9°2						12	-38°790	+32°525	65	798 9°7		12	+1°433	+40°348	65	823 9°6
19	+49°162	-53°614	66	721 9°1						16	-37°561	+20°443	65	799 9°7		9	+2°449	+25°285		
17	+49°322	-1°172	65	787 9°7						13	-36°487	+26°791	65	801 9°7		9	+2°973	+18°883		
10	+50°674	-7°427								18	-36°339	+3°620	65	800 9°4		12	+3°239	+40°807	65	824 9°7
9	+51°995	-10°217								11	-36°095	+64°370	64	743 9°7		9	+3°290	+25°142		
20	+52°172	-30°616	66	723 9°0						14	-34°729	+57°079	64	745 9°4		10	+3°581	+44°624		
10	+52°256	-60°110	66	724 9°7						10	-34°472	+10°944				16	+3°936	+6°381	65	825 9°4
15	+52°469	-8°027	66	722 9°7						10	-33°947	+6°745				22	+4°131	+26°065	65	826 9°0
	461										41						101			
10	+53°102	-8°234								9	-33°908	+12°696				76	+6°365	+3°542	65	827 6°3
10	+53°203	-18°122								9	-31°390	+1°055				9	+6°612	+21°185		
9	+53°557	-45°973								11	-31°054	+16°827	65	802 9°7		11	+6°941	+11°518		
11	+54°328	-26°072								11	-30°827	+3°595				9	+7°604	+50°192		
9	+54°890	-26°485								9	-30°099	+23°311				9	+8°898	+13°369		
11	+55°338	-3°600								11	-28°301	+42°709				18	+8°980	+54°298	65	828 9°3
11	+55°639	-50°700	66	725 9°7						9	-28°080	+31°384				11	+9°154	+8°753		
9	+56°829	-29°044								9	-27°706	+19°553				9	+10°396	+55°403		
10	+57°218	-45°095								12	-27°435	+15°348	65	803 9°6		9	+10°909	+38°341		
17	+57°348	-21°017	66	726 9°4						10	-27°292	+0°341				20	+12°383	+22°311	65	829 9°0

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
12	+14°568	+9°989	05° 830	9°5	17	+64°328	+19°769	65° 850	9°4	9	-27°335	-11°958			9	-3°600	-3°539		
9	+15°912	+16°668			40	-64°865	-44°068	66 717	9°0	9	-26°835	-40°475			12	-3°443	-42°465		
9	+16°069	+42°399			9	-63°359	-0°924			9	-26°241	-35°754			12	-3°383	-28°206		
9	+16°879	+16°800			19	-63°001	-15°386	66 718	9°4	38	-25°913	-58°497	66° 737	8°8	9	-3°141	-52°197		
13	+18°164	+58°176	04 761	9°7	10	-62°871	-15°849			14	-25°687	-4°890	66 738	9°6	9	-2°355	-54°665		
9	+19°084	+17°978			18	-61°705	-1°654	65 787	9°7	9	-25°390	-26°468			10	-1°827	-59°180		
9	+19°771	+27°025			24	-61°222	-17°942	66 719	9°2	11	-25°298	-16°712			11	-1°611	-4°452		
9	+19°963	+15°782			11	-59°906	-7°813			9	-23°814	-13°535			22	-1°180	-5°773	66° 752	9°1
9	+20°820	+11°434			15	-58°529	-59°751	66 720	9°4	16	-23°408	-32°899	66 739	9°4	10	-0°886	-37°591		
22	+21°211	+58°599	64 762	9°0	41	-58°121	-53°972	66 721	9°1	11	-23°227	-7°270			10	-0°513	-53°071		
	121					181					241					301			
11	+22°000	+20°915	65 831	9°0	15	-58°068	-8°269	66 722	9°7	9	-22°947	-31°110			19	-0°137	-38°755	66 753	9°4
12	+23°158	+34°504	65 832	9°7	10	-57°421	-8°436			14	-22°464	-62°338	66 740	9°7	11	+0°228	-38°365		
9	+23°548	+2°868			35	-56°752	-30°821	66 723	9°0	9	-22°278	-7°742			9	+0°608	-13°546		
12	+24°106	+35°867	65 833	9°7	11	-56°618	-18°292			13	-20°994	-12°582	66 741	9°7	9	+0°808	-54°435		
10	+24°408	+64°614			11	-55°539	-3°651			10	-20°808	-42°494			14	+0°897	-5°913	66 754	9°4
14	+25°042	+52°522	05 834	9°3	13	-54°930	-26°131			9	-20°619	-21°118			11	+1°111	-37°735		
11	+25°130	+11°275			13	-54°557	-60°225	66 724	9°7	10	-20°612	-13°154			9	+2°038	-38°436		
10	+25°792	+48°935			10	-54°268	-46°030			9	-20°552	-45°872			11	+4°172	-11°942		
9	+26°047	+33°158			20	-52°286	-20°881	66 726	9°4	14	-20°088	-63°354	66 742	9°6	14	+7°010	-58°615	66 755	9°7
9	+26°438	+50°814			9	-52°207	-28°915			13	-19°087	-15°905			10	+8°070	-48°397		
	131					191					251					311			
21	+26°510	+59°476	04 772	9°1	12	-51°865	-50°590	66 725	9°7	12	-18°740	-53°066			9	+8°822	-54°901		
18	+27°246	+26°983	65 835	9°4	9	-50°892	-19°455			10	-18°663	-53°522			18	+9°615	-28°223	66 756	9°4
19	+27°807	+8°227	65 836	9°1	10	-50°766	-2°704			10	-18°304	-8°976			14	+10°176	-34°441	66 757	9°0
13	+27°909	+1°556	65 837	9°7	11	-50°687	-44°882			10	-17°994	-51°342			11	+10°265	-49°589		
9	+28°097	+20°127			12	-50°430	-1°279			34	-16°272	-50°070	66 743	8°7	15	+12°980	-59°361	66 758	9°7
12	+29°328	+63°219	64 774	9°7	13	-48°813	-3°728			12	-16°258	-1°525			11	+13°017	-27°718		
11	+29°504	+58°588	64 775	9°7	9	-47°819	-52°291			10	-16°086	-55°362			9	+13°256	-57°937		
9	+29°697	+31°108			12	-47°796	-29°784	66 727	9°7	16	-15°797	-64°538	67 808	9°7	9	+13°591	-25°199		
10	+30°395	+35°578			13	-47°488	-13°240			12	-15°772	-25°151			9	+13°825	-62°747		
10	+31°020	+21°027			18	-46°298	-17°002	66 728	9°5	9	-15°656	-0°351			35	+13°863	-26°748	66 759	8°7
	141					201					261					321			
10	+32°079	-17°935			12	-45°899	-51°697			11	-15°308	-2°779			12	+14°398	-59°187		
12	+33°725	+34°361			13	-44°283	-25°360			11	-12°047	-57°036			11	+14°740	-6°517		
10	+33°838	+17°883			14	-43°873	-18°250	66 729	9°7	21	-11°942	-46°178	66 744	9°4	11	+16°397	-57°882		
14	+34°010	+49°555	65 838	9°4	10	-43°480	-13°499			9	-11°596	-46°312			10	+16°462	-36°891		
11	+35°100	+59°082	64 778	9°5	12	-43°407	-38°636			35	-11°407	-27°983	66 745	8°6	15	+16°702	-48°815	66 760	9°7
21	+37°052	+2°594	05 839	9°1	9	-42°285	-11°557			18	-11°284	-34°889	66 746	9°5	9	+16°755	-54°503		
9	+38°147	+30°201			10	-42°244	-41°897			9	-10°819	-2°926			10	+17°605	-16°747		
9	+41°045	+01°527			12	-41°659	-25°798			10	-10°579	-51°214			18	+17°944	-36°470	66 761	9°4
11	+41°253	+10°575			12	-40°894	-10°339			9	-10°462	-26°277			11	+17°984	-21°967		
10	+41°511	-1°751			20	-40°714	-61°615	66 730	9°3	11	-9°880	-15°156			11	+18°251	-18°088		
	151					211					271					331			
27	+44°459	+59°174	64 785	8°9	13	-39°961	-58°341	66 731	9°7	9	-9°385	-57°061			17	+18°343	-18°518	66 762	9°4
10	+44°526	+39°155			14	-38°547	-12°498	66 732	9°7	11	-9°085	-19°845			10	+19°484	-42°680		
9	+45°130	+31°272			10	-37°686	-22°245			12	-9°076	-43°306			20	+19°866	-61°200	66 763	9°5
11	+45°904	+31°510	05 840	9°7	13	-37°298	-7°549	66 734	9°7	16	-8°912	-22°517	66 747	9°7	10	+20°416	-37°059		
11	+46°774	+10°701			42	-36°783	-40°761	66 733	8°5	21	-8°816	-49°835	66 748	9°4	11	+20°984	-59°725		
12	+47°373	+19°395			13	-36°665	-55°298			9	-8°813	-12°006			20	+21°935	-20°950	66 765	9°3
20	+47°616	+26°369	05 842	9°1	23	-36°482	-39°442	66 735	9°1	9	-8°774	-6°254			13	+22°022	-7°280	66 764	9°7
12	+48°024	+54°625	05 841	9°5	9	-36°308	-24°416			17	-8°557	-49°975	66 749	9°7	10	+22°500	-6°604		
31	+49°327	+39°010	05 843	8°7	24	-36°118	-6°685	66 736	9°0	10	-8°071	-24°585			18	+22°697	59°908	66 766	9°7
9	+51°355	+16°270			14	-35°901	-58°968			9	-6°558	-64°506			10	+23°828	-49°039		
	161					221					281					341			
10	+52°139	+14°598	05 844	9°7	10	-35°227	-27°302			11	-6°453	-2°280			10	+24°866	-8°227		
22	+55°398	+25°213	05 845	9°0	10	-33°452	-59°427			10	-5°720	-47°471			10	+24°927	-9°664		
9	+55°612	+7°264			9	-33°155	-19°675			11	-5°562	-44°454			12	+25°040	-13°719		
9	+55°657	+24°090			9	-31°977	-16°500			16	-5°547	-51°081	66 750	9°5	12	+25°105	-7°511		
37	+55°664	+21°037	05 846	8°5	12	-29°307	-44°085			18	-5°496	-64°002	66 751	9°7	9	+25°780	-52°969		
15	+58°188	+14°385	05 847	9°4	10	-29°282	-39°285			9	-5°276	-34°031			16	+25°856	-51°318	66 767	9°6
11	+58°211	+11°151	65 848	9°7	13	-28°329	-32												

C.P.D.				C.P.D.				C.P.D.				C.P.D.								
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	
	351					411				PLATE CENTRE. 8^h 6^m, - 66°. Plate 3229. 1910, Feb. 9. PROVISIONAL CONSTANTS. <i>a</i> = - .01151 <i>d</i> = - .00084 <i>b</i> = + .00047 <i>e</i> = - .01154 <i>c</i> = + .0838 <i>f</i> = - .0033 To obtain standard-co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						51				
9	+27°608	-45°883			9	+61°784	-21°128			12	-34°755	+22°134			12	-34°755	+22°134			
10	+29°718	-5°624			12	+62°007	-59°495	66	784	9°5	16	-34°503	+1°672	65	855	9°6				
9	+30°081	-33°165			15	+64°033	-18°122	66	785	9°3	10	-33°547	+30°841			10	-33°547	+30°841		
10	+30°142	-38°200									10	-33°178	+38°533			10	-33°178	+38°533		
17	+30°167	-45°363	66	768	9°7						16	-32°801	+50°778	65	856	9°5				
9	+30°825	-34°590									10	-31°843	+60°346			10	-31°843	+60°346		
12	+30°958	-63°088									9	-29°897	+43°212			9	-29°897	+43°212		
12	+31°377	-53°105									11	-29°174	+64°222			11	-29°174	+64°222		
11	+31°785	-26°446									12	-28°598	+19°247			12	-28°598	+19°247		
10	+32°140	-24°871									9	-28°565	+15°833			9	-28°565	+15°833		
	361																			
12	+32°246	-36°005									40	-27°540	+41°776	65	857	8°6				
9	+33°727	-6°177									9	-27°500	+38°542			9	-27°500	+38°542		
22	+34°348	-49°176	66	769	9°0						11	-27°445	+1°832			11	-27°445	+1°832		
10	+35°550	-37°495									12	-27°034	+4°178			12	-27°034	+4°178		
13	+35°794	-41°768	66	770	9°7						51	-26°777	+15°839	65	858	8°3				
9	+36°564	-26°886									13	-26°193	+15°045			13	-26°193	+15°045		
11	+36°905	-61°048									16	-25°786	+33°089	65	859	9°7				
13	+37°940	-36°655	66	771	9°7						16	-25°724	+26°709	65	860	9°5				
10	+39°235	-38°105									40	-25°224	+57°965	64	811	8°7				
14	+39°662	-37°533	66	772	9°6						30	-23°956	+4°155	65	861	9°1				
	371																			
12	+40°156	-45°204									9	-23°850	+5°956			9	-23°850	+5°956		
11	+40°692	-35°429									10	-22°453	+41°127			10	-22°453	+41°127		
10	+41°756	-44°800									9	-21°222	+44°760			9	-21°222	+44°760		
9	+42°320	-35°432									9	-21°020	+47°317			9	-21°020	+47°317		
10	+42°544	-9°281									14	-21°000	+49°717			14	-21°000	+49°717		
20	+42°549	-39°753	66	773	9°1						10	-20°792	+58°641			10	-20°792	+58°641		
10	+43°547	-55°218									14	-18°741	+4°191			14	-18°741	+4°191		
10	+43°708	-36°227									11	-18°493	+1°925			11	-18°493	+1°925		
9	+44°900	-55°664									11	-18°443	+29°859			11	-18°443	+29°859		
10	+45°049	-23°491									9	-17°318	+42°400			9	-17°318	+42°400		
	381																			
16	+45°070	-44°797	66	774	9°4						10	-15°757	+17°382			10	-15°757	+17°382		
13	+45°136	-60°545									10	-15°139	+50°000			10	-15°139	+50°000		
12	+45°399	-6°960									9	-14°203	+18°801			9	-14°203	+18°801		
15	+46°312	-13°529	66	775	9°5						10	-13°684	+18°077			10	-13°684	+18°077		
11	+46°428	-12°703									26	-13°634	+63°784	64	816	9°4				
12	+46°471	-30°556									9	-12°817	+43°172			9	-12°817	+43°172		
9	+46°912	-18°806									16	-12°759	+23°818	65	863	9°6				
11	+47°063	-57°382									15	-12°643	+40°314			15	-12°643	+40°314		
9	+48°732	-18°440									13	-12°524	+14°442			13	-12°524	+14°442		
9	+49°142	-3°701									16	-11°782	+45°294	65	864	9°7				
	391																			
11	+49°597	-16°088									11	-11°433	+24°514			11	-11°433	+24°514		
18	+50°476	-37°533	66	777	9°4						35	-11°006	+14°788	65	865	9°4				
22	+50°929	-20°692	66	776	9°1						12	-10°942	+54°679			12	-10°942	+54°679		
30	+51°177	-57°434	66	779	9°0						11	-9°096	+15°497			11	-9°096	+15°497		
11	+51°223	-19°843									13	-8°233	+1°826			13	-8°233	+1°826		
21	+52°036	-31°090	66	778	9°0						16	-7°591	+0°454	65	867	9°7				
10	+52°365	-18°049									11	-7°153	+31°701			11	-7°153	+31°701		
9	+52°717	-24°436									25	-6°944	+8°093	65	868	9°5				
9	+52°883	-24°365									9	-6°750	+15°381			9	-6°750	+15°381		
10	+53°785	-43°422									14	-6°606	+10°656			14	-6°606	+10°656		
	401																			
18	+54°809	-46°017	66	780	9°3						14	-6°239	+24°411			14	-6°239	+24°411		
14	+55°288	-53°779									30	-6°005	+46°041	65	869	9°0				
9	+55°572	-3°915									35	-5°548	+12°338	65	870	8°9				
10	+56°647	-27°493									25	-5°151	+28°799	65	871	9°4				
10	+57°006	-35°211									9	-5°143	+6°653			9	-5°143	+6°653		
15	+57°245	-25°772	66	781	9°4						10	-4°773	+3°711			10	-4°773	+3°711		
11	+57°886	-44°555									10	-4°442	+18°777			10	-4°442	+18°777		
10	+58°586	-49°741									12	-4°156	+10°690			12	-4°156	+10°690		
18	+59°058	-17°552	66	782	9°3						9	-3°453	+7°485			9	-3°453	+7°485		
44	+59°985	-31°607	66	783	8°3						15	-1°875	+34°513			15	-1°875	+34°513		

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
111					171					231					291					
16	- 1°542	+11°570	65	872	9°3	26	+27°679	+52°205	65	885	9°3	34	+55°618	+61°740	64	841	9°7	9	-36°188	-32°547
16	- 1°461	+11°584				9	+28°722	+14°470				9	+55°672	+22°691				12	-36°143	-14°198
10	- 1°407	+39°413				12	+29°095	+22°817				15	+56°516	+ 5°066				26	-35°772	-47°231
28	- 1°301	+38°963				22	+30°389	+14°329				10	+56°802	+ 7°086				9	-33°522	- 4°214
15	- 1°255	+10°884	65	873	9°1	22	+30°435	+ 4°262	65	888	9°4	11	+57°942	+41°068			12	-32°910	- 8°479	
12	- 1°170	+45°702				9	+30°803	+52°262				9	+58°542	+31°086			12	-31°772	-26°693	
9	- 1°070	+28°251				9	+30°864	+23°623				15	+58°815	+41°471	65	900	9°5	15	-30°974	-33°743
10	- 0°904	+15°506				26	+31°290	+53°974	65	886	9°2	10	+58°842	+45°619			25	-30°650	-22°237	
9	- 0°593	+39°397				12	+31°787	+ 1°811				11	+59°617	+52°166			15	-30°398	-31°803	
9	- 0°310	+26°361				9	+31°868	+28°888				15	+61°230	+12°097			9	-29°671	-12°156	
121						181						241					301			
9	- 0°231	+27°393	65	874	9°7	34	+33°050	+58°724	64	835	9°4	15	+62°365	+26°877	65	901	9°7	13	-29°222	-16°255
9	- 0°049	+ 6°561				10	+34°016	+11°608				35	+63°186	+15°792				9	-28°749	-18°596
16	+ 0°159	+48°903				32	+34°303	+45°410				54	+63°999	+38°507				11	-28°599	-37°409
13	+ 1°462	+27°043				9	+34°619	+14°225				9	-64°938	-36°991				27	-28°353	- 9°507
27	+ 1°648	+29°832	65	875	9°2	9	+34°754	+ 9°411				9	-64°539	-24°181			12	-27°763	-39°080	
9	+ 1°826	+11°578				9	+35°492	+ 8°819				28	-63°975	-14°154	66	775	9°5	14	-27°762	-22°835
9	+ 1°955	+17°872				14	+36°588	+ 0°789				10	-63°924	-13°322			9	-27°121	-24°606	
11	+ 3°197	+35°942	65	876	8°6	14	+36°866	+ 4°719				9	-62°981	-19°368			13	-26°979	-22°927	
42	+ 3°866	+19°215				15	+36°905	+35°122	12	-62°954	-45°442	66	774	9°4	10	-25°354	-31°449			
12	+ 3°921	+10°492				29	+37°813	+34°604	12	-62°588	-31°129				17	-25°313	-11°614			
131						191			251						311					10	-24°799	-41°318
10	+ 4°165	+40°014	65	877	9°4	13	+38°408	+ 8°713	65	891	8°9	10	-61°863	- 4°148			15	-23°667	- 1°880	
26	+ 4°229	+24°682				30	+38°588	+54°994				9	-61°759	-61°139	9	-22°675	-55°481			
9	+ 4°731	+40°558				14	+39°122	+37°680				9	-61°207	-18°873	9	-22°210	- 3°616			
9	+ 5°769	+24°027				16	+39°469	+16°153				12	-60°515	-16°463	13	-22°168	-34°421			
9	+ 5°947	+ 2°290				10	+39°989	+30°539				9	-59°139	-57°770						
9	+ 6°068	+16°495				12	+40°050	+ 8°639				44	-58°866	-20°970	66	775	9°5	29	-21°622	-19°698
11	+ 7°083	+29°945				16	+40°795	+ 8°374	65	893	9°7	12	-58°624	-20°081			11	-20°818	-27°912	
13	+ 7°424	+12°185	18	+41°242	+47°208	30	-58°098	-37°815				66	777	9°4	40	-20°118	-33°800			
14	+ 7°528	+55°374	13	+41°401	+58°830	11	-57°618	-18°224							10	-18°845	-33°157			
15	+ 8°456	+10°039	10	+41°433	+59°948	9	-57°441	-19°143							25	-18°607	-14°407			
141						201			64	837	9°4	261			66	778	9°0	321		
9	+ 8°822	+39°398	29	+41°446	+58°010	37	-57°012	-31°261				38	-18°477	- 3°693						
10	+ 9°096	+64°670	10	+41°847	+57°296	9	-56°765	-24°581				10	-16°911	-29°943						
10	+10°505	+15°052	10	+41°991	+19°557	11	-56°643	-24°487				10	-16°437	- 0°053						
10	+11°461	+35°851				11	+42°401	+50°114				9	-56°409	-11°470			15	-14°891	-62°228	
10	+12°247	+54°786				11	+42°495	+59°604				45	-55°951	-57°618	66	779	9°0	9	-14°382	-29°721
12	+12°452	+ 3°168				11	+42°770	+19°418				11	-55°438	- 3°900			24	-13°305	-25°619	
10	+12°469	+49°415				10	+43°622	+18°041				10	-55°427	-12°141			10	-13°181	-21°412	
9	+13°936	+ 6°303				11	+43°703	+ 0°769				9	-54°373	-43°429			12	-12°763	-41°940	
9	+14°604	+ 6°503				10	+43°830	+ 4°483				36	-53°159	-45°946	66	780	9°3	52	-12°451	-56°008
12	+14°950	+26°742				10	+44°327	+20°129				11	-52°651	-27°332			10	-12°416	-34°211	
151						211						271					331			
9	+15°161	+34°610	65	878	9°4	35	+44°742	+16°389	65	895	8°8	28	-52°201	-25°576	66	781	9°4	9	-12°108	-54°243
18	+16°150	+30°062				28	+44°757	+ 1°785				12	-52°116	-53°649				10	-11°729	-54°563
9	+17°164	+21°963				37	+44°913	+23°081				29	-50°990	-17°238				16	-11°009	-42°504
28	+17°851	+49°117				9	+45°141	+14°806				11	-50°204	-44°257				10	-10°949	- 8°630
18	+17°923	+20°367	65	880	9°4	9	+46°583	+24°679				9	-49°179	-23°353			10	-10°940	-31°985	
9	+18°173	+51°950				16	+47°730	+ 1°568	65	897	9°1	10	-49°126	-49°365			16	- 9°340	-11°066	
11	+19°125	+ 2°937	16	+47°808	+ 1°578	50	-49°038	-31°199				17	- 7°895	- 0°054						
11	+20°017	+20°737	10	+48°126	+41°716	11	-48°017	-20°614				12	- 7°353	- 3°718						
11	+20°522	+19°001	11	+48°552	+ 5°767	17	-45°974	-17°446				15	- 7°326	-46°731						
10	+20°651	+21°981				9	+50°467	+30°180				9	-45°212	-27°139			10	- 7°136	-49°620	
161						221						281					341			
10	+20°680	+20°252	65	881	9°6	12	+50°555	+34°377	65	898	9°7	12	-45°000	-58°865	66	784	9°5	9	- 6°973	-62°236
11	+21°236	+33°727				9	+51°657	+27°965				9	-43°191	-22°920				11	- 5°631	-39°640
16	+21°238	+17°518				9	+51°797	+27°850				12	-42°571	- 1°856				26	- 5°226	-10°222
25	+21°970	+26°977				14	+52°656	+43°992				12	-41°606	-33°579				13	- 5°126	-17°318
16	+22°339	+50°734	65	882	9°7	10	+52°713	+10°126				12	-41°060	- 0°763			9	- 4°365	-53°303	
11	+22°408	+32°640				11	+52°738	+44°048				11	-39°913	-13°340			9	- 4°293	-46°629	
33	+22°620	+16°905	65	884	8°8	10	+53°238	+27°739	65	899	9°7	9	-39°481	-13°394			13	- 4°029	-51°593	
14	+23°202	+48°685				16	+53°303	+17°746				10	-37°438	-51°960	9	- 3°569	-19°195			
9	+24°660	+31°528				9	+54°737	+ 4°053				13	-37°406	-23°136	12	- 3°002	- 0°187			
11	+27°031	+55°462				9	+55°558	+23°307				11	-37°124	-47°830	14	- 1°973	-53°615			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,				PLATE CENTRE, 8^h 24^m, - 66°. Plate 323I. 1910, Feb. 9. PROVISIONAL CONSTANTS. $a = -0.01150$ $d = -0.00054$ $b = +0.00080$ $e = -0.01152$ $c = +0.0862$ $f = -0.0503$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$				
10	- 1°502	-49°106			9	+31°233	-25°150			15	+59°659	-16°389			24	-63°531	+ 0°093	} 65° 897	9°1
12	- 1°335	-10°876			9	+32°826	-18°694			9	+60°340	-58°178			28	-63°448	+ 0°994		
10	- 1°332	- 0°012			13	+33°495	-46°323			57	+60°760	-64°124	66° 818	9°0	10	-63°051	+33°901		
11	+ 0°696	-31°829			9	+34°029	-44°376			9	+60°875	-62°241			9	-62°996	+ 5°240		
9	+ 2°239	-20°629			9	+35°530	-46°950			11	+61°060	-37°214			10	-61°645	+43°652	} 65° 898	9°7
12	+ 2°977	- 3°432			12	+35°569	-39°565			15	+61°202	- 2°649	65° 902	9°7	10	-61°583	+43°700		
10	+ 3°390	-34°867			27	+35°662	- 5°675	66° 807	9°3	12	+61°661	- 9°386			9	-61°513	+27°586		
13	+ 3°600	-55°396			12	+36°324	- 1°167			9	+61°977	-62°111			11	-59°963	+61°570		
26	+ 3°889	- 52°415	56° 800	9°1	9	+36°725	-41°500			42	+62°185	- 9°390	66° 817	9°4	9	-59°907	+27°488		
10	+ 4°197	-11°669			10	+37°076	-26°089			9	+62°573	-34°008			9	-59°175	+ 9°887		
	361					421					481				11				
11	+ 4°343	- 0°382			9	+37°282	-12°986			9	+62°958	-12°875			15	-59°130	+17°530	65° 899	9°7
10	+ 6°430	-54°078			12	+37°614	-64°828	66° 808	9°6	11	+63°443	-50°763			9	-57°244	+23°215		
11	+ 6°477	-23°941			9	+38°165	-42°731			10	+64°877	-11°060			9	-57°118	+22°613		
9	+ 8°723	-33°131			25	+38°433	-59°590	66° 809	9°4	9	+64°901	-32°017			9	-56°186	+41°113		
10	+ 8°904	-27°122			9	+38°706	- 0°144								10	-55°600	+45°725		
9	+ 9°384	-52°211			11	+38°792	-11°757								9	-55°339	+47°364		
11	+ 9°760	-14°138			12	+39°127	-13°182								15	-55°329	+41°584	65° 900	9°5
9	+10°929	-22°065			9	+40°411	-30°597								10	-55°311	+52°301		
10	+11°222	-34°887			13	+40°611	-25°433								11	-55°030	+ 5°119		
15	+11°980	-52°943	} 66° 801	9°5	10	+40°774	-26°194								9	-54°877	+31°203		
11	+12°036	-52°815						431									21		
28	+12°409	-27°286	66° 802	9°3	10	+41°044	-34°312								9	-54°865	+ 7°144		
10	+12°873	-32°355			9	+41°182	-51°873								9	-53°661	+16°423		
9	+13°022	-19°256			9	+42°056	-25°159								9	-51°829	+17°312		
11	+13°054	-34°969			10	+42°132	-40°633	66° 810	8°8						9	-51°702	+56°183		
					40	+ 42°346	- 18°588								9	-51°368	+45°669		
12	+13°997	-27°294			15	+42°696	-34°763								15	-50°817	+12°462		
10	+14°708	-40°926			11	+43°754	-23°384								16	-50°743	+27°284	65° 901	9°7
10	+14°828	-51°283			14	+44°072	-24°401								28	- 49°951	+ 39°001	65° 903	8°8
15	+16°322	-56°925	66° 803	9°7	12	+45°576	-14°440								9	-49°541	+25°174		
9	+16°417	- 6°312			26	+45°631	-50°928	66° 811	9°4						18	-49°137	+16°287	65° 904	9°4
	381					441									31				
10	+17°347	- 3°289			13	+46°310	-23°921								9	-48°930	+57°711		
10	+17°371	-50°127			12	+46°532	- 0°725								12	-48°366	+39°169		
9	+17°752	-41°410			15	+46°568	-15°389								15	-47°644	+42°850		
9	+17°810	- 3°621			11	+47°780	-35°283								9	-47°455	+ 6°467		
11	+19°169	-51°953			14	+47°879	-25°073								10	-47°090	+28°114		
															9	-47°080	+52°228		
12	+19°531	-37°627			10	+48°276	- 4°729								24	-46°148	+59°342	64° 847	9°0
11	+19°670	-38°212			9	+48°390	-22°114								12	-46°129	+23°776		
14	+20°940	- 9°247			10	+48°478	-61°131								26	- 46°106	+ 42°324	65° 905	8°7
11	+21°017	-16°303			13	+48°621	-29°543								10	-46°033	+29°484		
12	+22°057	- 2°803			9	+49°944	-17°286								41				
	391					451									9	-45°316	+18°869		
10	+25°872	- 6°178			13	+49°980	-51°814								16	-45°097	+16°733		
9	+25°883	-34°521			29	+50°064	-26°882	66° 812	9°4						9	-44°856	+40°202		
9	+26°070	-19°572			9	+51°040	-45°229								9	-44°530	+40°485		
13	+26°805	-22°604	} 66° 804	9°7	9	+51°435	-23°278								9	-44°529	+39°606		
15	+27°090	-22°511					12	+51°862	-27°162										
11	+27°480	-33°269			11	+51°862	- 8°301								16	-43°835	+36°165	65° 906	9°7
12	+27°687	-21°533			12	+52°494	- 3°860								64	-43°186	+41°998	65° 907	6°8
10	+27°992	-27°474			34	+53°267	-55°140	66° 813	9°4						9	-42°578	+17°672		
9	+28°044	-19°747			12	+53°735	-13°030								10	-42°577	+26°664		
11	+28°084	- 6°326			9	+54°352	-61°719								18	-42°173	+31°074	65° 908	9°3
	401					461													
9	+28°279	- 0°955			9	+55°301	- 8°368												
9	+28°862	-47°749			10	+55°413	-32°338												
34	+28°981	-64°237	66° 806	8°9	12	+56°051	- 8°252												
15	+28°989	-36°139	66° 805	9°7	16	+56°083	-30°514	66° 814	9°7										
9	+29°314	-27°978			12	+56°778	-45°467												
9	+29°354	-15°307			9	+56°902	- 7°438												
9	+30°427	- 2°017			12	+57°255	- 5°734												
12	+30°868	-20°383			31	+58°101	-35°376	66° 815	9°4										
10	+30°935	-12°528			13	+58°427	-10°467												
12	+31°152	-17°444			13	+58°701	-51°975	66° 816	9°5										

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	51					111					171					231							
9	-41°897	+19°486	65	909	9°4	12	-20°062	+34°516	65	918	9°0	12	-1°145	+7°342	9	+18°226	+63°059	65	950	9°8			
18	-41°486	+31°531				10	-19°839	+55°078				9	-0°988	+28°552		9	+18°382				+42°561		
10	-41°385	+6°083				9	-19°790	+31°053				9	-0°474	+48°967		17	+18°410				+4°605		
9	-40°470	+3°905				10	-19°777	+9°920				12	-0°368	+63°679		9	+19°038				+52°305		
26	-39°774	+62°530	64	850	8°5	12	-19°639	+34°161				9	-0°362	+51°716	9	+19°440	+42°703						
15	-39°684	+16°739				24	-19°334	+51°071	65	919	9°2	10	-0°012	+12°628	9	+19°686	+41°119	65	951	9°1			
9	-39°111	+44°372	9	-18°942	+39°206	9	+1°099	+53°169				9	+19°738	+39°424									
9	-39°032	+2°160	20	-18°880	+23°184	9	+1°299	+35°371				16	+19°794	+40°525									
12	-38°392	+41°994	40	-18°752	+48°372	16	+2°417	+21°311				12	+20°079	+41°161									
9	-38°051	+35°716				9	-18°629	+35°738	65	920	8°1	9	+2°609	+7°318	65	930	10°0	65	952	10°0			
	61						121						181			241							
9	-37°809	+6°883	65	910	9°3	13	-18°411	+37°441	65	921	9°9	11	+2°883	+22°913	65	932	10°0	10	+20°769	+56°201	65	953	9°4
9	-37°327	+19°239				9	-18°385	+25°938				9	+3°239	+25°465				18	+20°772	+29°477			
21	-37°079	+8°951				10	-18°099	+45°252				19	+3°454	+3°720				9	+21°462	+0°350			
9	-36°998	+10°888				16	-17°279	+14°279				15	+3°678	+20°587				9	+21°849	+7°401			
10	-36°772	+40°452				24	-17°187	+13°243	65	922	8°8	9	+3°894	+53°268	9	+22°537	+64°057						
11	-36°455	+53°484				9	-16°135	+27°016				68	+3°941	+11°964	65	933	5°7	15	+23°131	+0°724	65	954	10°0
9	-35°732	+39°883	10	-15°774	+42°387	9	+3°956	+62°711	9	+23°195	+48°476												
9	-35°405	+21°262	11	-15°086	+7°388	9	+4°125	+17°683	10	+23°267	+20°324												
15	-35°259	+22°237	10	-14°997	+47°841	9	+4°603	+18°509	15	+23°590	+32°582												
9	-34°494	+39°639	65	911	9°9	17	-14°718	+17°100	65	923	9°7	15	+5°643	+20°817	65	935	9°9	10	+24°193	+2°399			
	71						131						191			251							
9	-34°133	+58°292	65	912	10°0	11	-14°704	+38°327	65	924	9°1	14	+5°818	+31°174	65	936	10°0	9	+24°642	+10°740	65	954	10°0
9	-33°959	+48°122				9	-14°230	+29°906				18	+5°933	+44°453				12	+24°784	+6°897			
10	-33°785	+45°506				9	-13°744	+28°230				18	+6°791	+22°529				16	+25°178	+5°776			
10	-33°524	+44°277				9	-12°956	+60°372				9	+6°834	+1°552				9	+26°230	+12°790			
10	-33°495	+61°110				9	-12°372	+58°176				12	+6°863	+59°283	9	+26°272	+11°964						
9	-33°044	+18°773	65	913	9°8	9	-11°701	+53°334	65	925	9°8	11	+6°870	+20°880	65	937	9°5	9	+26°555	+49°153	65	955	9°4
9	-33°031	+0°686				10	-11°349	+14°730				9	+6°980	+58°469				11	+28°006	+30°228			
12	-32°972	+52°556				9	-11°194	+30°613				22	+7°572	+5°739				9	+28°018	+34°590			
10	-30°595	+17°353				9	-11°022	+62°379				10	+8°625	+15°528				9	+28°539	+24°954			
16	-30°535	+27°651				26	-9°088	+31°209	65	924	9°1	19	+9°341	+49°776	65	940	9°2	13	+27°736	+40°458			
	81						141						201			261							
9	-29°890	+7°293	65	914	9°1	9	-8°847	+23°390	65	926	9°5	9	+9°717	+22°841	65	941	9°3	9	+27°803	+15°763	65	956	9°2
9	-29°190	+3°921				9	-8°773	+41°298				18	+9°833	+20°139				11	+28°018	+34°590			
9	-29°101	+19°341				9	-8°539	+53°175				14	+9°861	+63°879				9	+28°539	+24°954			
10	-28°810	+50°185				12	-8°327	+41°168				9	+10°027	+25°823				10	+28°555	+18°728			
12	-28°666	+8°617				10	-7°659	+42°930				20	+10°235	+19°903	65	942	9°2						
11	-28°330	+4°041	65	916	9°4	16	-7°230	+54°081	65	927	10°0	9	+10°292	+42°113	65	943	10°0	9	+28°616	+57°704	65	957	9°1
9	-28°122	+10°106				17	-7°215	+46°583				13	+10°862	+44°513				10	+29°504	+7°489			
9	-27°048	+64°060				9	-6°577	+55°845				12	+10°977	+59°088				9	+30°362	+20°239			
9	-26°851	+37°869				15	-6°272	+18°083				9	+11°146	+49°829				9	+30°408	+2°707			
9	-26°800	+11°103				9	-6°121	+29°401				9	+11°192	+11°463	11	+30°470	+25°431						
	91						151						211			271							
9	-26°755	+40°278	65	917	9°1	16	-5°931	+47°104	65	928	9°5	9	+11°711	+42°311	65	944	9°1	9	+30°499	+13°554	65	958	9°2
9	-26°523	+9°320				13	-5°568	+14°292				22	+11°909	+19°432				18	+30°718	+15°866			
20	-26°382	+41°226				11	-5°147	+24°181				9	+11°958	+17°450				9	+30°939	+62°693			
9	-25°828	+27°360				10	-5°128	+23°863				12	+12°085	+50°312				9	+31°140	+21°916			
9	-25°746	+19°177				9	-5°103	+22°473				10	+13°003	+56°397	10	+31°148	+2°702						
18	-24°722	+45°123	65	918	9°4	9	-4°789	+26°450	65	929	9°3	9	+13°237	+5°419	65	945	9°7	22	+32°103	+58°576	65	959	9°1
14	-24°441	+16°091				10	-4°658	+27°596				9	+13°291	+5°469				13	+32°222	+34°518			
9	-24°419	+7°692				10	-4°502	+36°735				9	+13°363	+23°267				10	+32°651	+53°631			
9	-24°222	+13°341				12	-4°453	+29°894				9	+13°429	+40°571				9	+33°766	+64°987			
9	-24°189	+31°392				10	-4°155	+38°651				15	+13°581	+54°026	65	945	9°7	9	+34°123	+20°264			
	101						161						221			281							
15	-23°591	+41°336	65	919	9°1	12	-3°953	+37°629	65	930	9°6	9	+13°652	+31°710	65	946	9°4	20	+34°209	+44°440	65	960	9°2
9	-23°330	+62°258				9	-3°900	+48°432				9	+13°872	+34°875				9	+34°246	+63°343			
9	-22°897	+52°115				9	-3°587	+29°001				18	+14°479	+13°653				9	+34°741	+1°229			
30	-21°334	+39°317				15	-3°480	+58°359				16	+15°091	+3°023				9	+34°820	+1°643			
9	-21°006	+39°035				9	-3°383	+55°685				12	+15°772	+41°981	65	947	9°6	12	+35°543	+25°065			
11	-20°950	+36°615	65	920	9°1	17	-3°131	+29°979	65	931	9°5	18	+15°944	+36°006	65	948	9°4	10	+35°691	+32°655	65	961	9°1
9	-20°628	+1°956				9	-2°809	+34°967				13	+16°454	+48°384				9	+35°972	+49°409			
14	-20°522	+10°453				9	-2°438	+46°102				9	+16°546	+28°893				10	+36°215	+7°267			
10	-20°302	+32°982				19	-2°276	+45°934				11	+16°820	+62°951				9	+36°743	+58°440			
9	-20°275	+20°603				9	-1°399	+27°589				9	+17°794	+51°560				9	+36°824	+56°217			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291					351					411					471			
24	+36°008	+40°090	65	958	8°8	14	+61°671	+28°726	65°	976	10°0	11	-45°531	-10°384		9	-24°390	-34°514	
15	+37°503	+6°959				9	+61°907	+6°894				9	-45°360	-36°338		18	-24°243	-1°112	65°
10	+38°154	+25°665				9	+61°964	+18°754				9	-45°347	-3°877		9	-24°113	-6°856	915
10	+38°261	+31°281				10	+61°999	+48°253				9	-44°761	-61°495		9	-23°786	-59°289	
18	+38°618	+49°224	65	959	7°1	10	+63°225	+33°782				10	-44°221	-4°365		13	-23°564	-26°274	
9	+38°929	+43°495				9	+63°465	+10°998				9	-44°216	-44°793		21	-23°474	-25°240	66°
9	+38°930	+11°309				11	-64°545	-1°388				12	-44°105	-50°095		9	-23°252	-63°302	836
24	+39°073	+38°375	65	960	8°4	11	-64°505	-15°186				10	-44°010	-31°281		9	-22°949	-12°672	
9	+39°162	+24°289				13	-63°463	-16°018				16	-43°930	-19°506		16	-22°492	-31°006	66°
9	+39°341	+52°507				11	-63°115	-24°538				9	-42°759	-9°425		10	-22°486	-40°422	837
	301						361						421				481		10°0
9	+40°183	+44°217				9	-62°534	-5°265				15	-42°573	-5°919		9	-22°315	-20°625	
15	+40°643	+32°635	65	961	10°0	16	-61°848	-51°538	66	811	9°4	9	-41°897	-7°652		9	-22°133	-5°486	
10	+40°923	+23°639				12	-61°454	-25°596				26	-41°734	-12°544	66°	9	-22°034	-52°398	819
9	+41°772	+30°866				9	-61°160	-22°587				14	-40°478	-9°755		10	-21°810	-60°638	8°8
9	+41°987	+2°935				9	-60°823	-35°779				11	-40°331	-20°641		10	-21°728	-51°041	
19	+42°075	+35°097	65	962	8°9	11	-60°396	-29°969				18	-39°782	-37°783	66°	10	-21°623	-0°668	820
9	+42°085	+64°907				9	-59°414	-22°971				14	-39°683	-2°496		9	-21°573	-22°902	9°3
9	+42°943	+1°457				18	-59°147	-27°234	66	812	9°4	16	-39°547	-18°146	66°	9	-21°528	-43°866	822
23	+43°094	+40°290	65	963	8°7	11	-58°708	-8°569				15	-39°241	-58°586	66°	9	-21°441	-22°351	821
15	+43°123	+22°049	65	965	10°0	11	-58°384	-4°084				15	-39°197	-47°869		14	-21°432	-31°447	9°7
	311						371						431				491		
11	+43°660	+45°210				9	-58°268	-61°493				18	-38°908	-19°502	66°	22	-21°300	-28°939	824
10	+43°880	+28°714				9	-58°015	-23°524				9	-38°670	-12°338		11	-21°296	-39°169	9°4
9	+43°996	+16°951				11	-57°465	-52°104				20	-38°499	-34°456	66°	9	-21°092	-11°366	823
9	+44°185	+64°973				11	-57°337	-27°382				9	-36°957	-1°142		10	-19°976	-53°674	9°1
17	+44°585	+29°853	65	967	9°3	12	-56°499	-13°146				9	-36°855	-14°003		17	-19°743	-18°187	
15	+44°850	+52°516	65	966	9°8	9	-55°946	-8°257				9	-36°684	-60°865		9	-19°427	-56°776	
24	+45°150	+15°065	65	969	9°1	9	-55°418	-6°277				14	-36°040	-5°711		9	-19°180	-51°341	
19	+45°312	+13°115	65	970	9°5	9	-55°256	-8°382				10	-35°185	-37°996		9	-18°951	-32°571	
14	+45°337	+43°077	65	968	10°0	9	-54°813	-9°471				14	-33°504	-53°925		9	-18°193	-11°661	
15	+45°708	+63°733	64	908	9°8	11	-54°521	-8°209				22	-33°329	-18°756	66°	9	-18°088	-1°005	825
	321						381						441				501		
9	+46°244	+1°465				20	-53°945	-55°194	66	813	9°4	11	-33°217	-14°388		9	-17°731	-44°552	
9	+46°280	+34°536				9	-53°706	-7°335				10	-32°502	-59°063		9	-17°538	-15°235	
10	+48°470	+23°609				12	-53°509	-5°622				10	-32°496	-7°860		20	-17°477	-4°918	66°
18	+48°526	+34°830	65	971	9°2	10	-53°426	-32°287				9	-32°363	-19°055		15	-17°469	-15°325	842
9	+49°176	+14°853				17	-52°894	-30°421	66	814	9°7	11	-32°064	-21°153		11	-17°427	-25°492	841
9	+49°307	+6°565				9	-52°797	-27°412				10	-31°947	-16°485		9	-17°407	-27°491	
11	+49°593	+46°158				9	-52°660	-8°647				14	-31°303	-25°692		34	-17°113	-61°582	66°
9	+49°682	+28°467				9	-52°396	-61°663				9	-31°188	-9°710		12	-16°872	-23°414	840
12	+49°847	+25°476				15	-51°994	-10°269				9	-30°561	-4°364		14	-16°382	-8°058	
10	+49°887	+34°662				9	-51°602	-6°065				22	-30°266	-11°121	66°	9	-15°843	-6°954	826
	331						391						451				511		
15	+49°922	+2°985	65	972	10°0	11	-51°120	-45°284				16	-29°097	-21°455	66°	11	-13°750	-30°828	827
10	+50°102	+28°463				18	-50°539	-35°130	66	815	9°4	17	-28°672	-11°008	66°	9	-13°503	-9°946	829
9	+50°122	+5°419				9	-50°513	-11°111				9	-28°642	-3°176		11	-13°285	-60°481	
9	+50°162	+17°477				16	-50°352	-16°080				9	-28°580	-45°849		11	-12°933	-52°454	
15	+50°607	+64°156	64	912	9°5	9	-50°066	-16°333				9	-28°576	-32°865		11	-12°565	-40°138	
9	+50°713	+7°884				9	-49°807	-54°003				11	-28°467	-38°469		9	-12°553	-44°736	
11	+51°158	+16°740				16	-49°785	-2°253	65	902	9°7	16	-28°298	-44°211	66°	9	-12°510	-46°962	828
9	+51°629	+31°494				11	-48°844	-8°939				16	-27°701	-32°479	66°	9	-12°395	-59°734	830
9	+52°041	+41°206				16	-48°751	-51°639	66	816	9°5	11	-27°473	-16°134		10	-12°314	-14°231	
12	+52°052	+32°556				9	-48°519	-54°197				16	-27°015	-11°316	66°	9	-12°282	-48°486	834
	341						401						461				521		
10	+52°326	+48°653				9	-48°356	-15°161				16	-26°903	-39°443	66°	11	-11°780	-27°959	831
9	+52°442	+5°529				18	-48°320	-8°911	66	817	9°4	19	-26°587	-52°922	66°	13	-11°718	-13°670	832
10	+53°266	+24°325				9	-47°684	-8°315				11	-26°469	-63°518	66°	10	-11°575	-53°455	833
9	+54°081	+15°042				11	-47°453	-36°734				9	-26°460	-28°301		10	-11°383	-32°744	
9	+54°341	+25°947				10	-47°316	-12°338				9	-26°403	-25°422		13	-11°359	-16°763	
9	+56°388	+48°801				10	-46°652	-57°693				10	-25°990	-16°864		11	-11°038	-32°535	
19	+58°879	+18°270	65	975	9°2	10	-46°461	-28°362				9	-25°199	-22°791		9	-10°713	-50°511	
9	+59°820	+48°660				10	-46°177	-33°431				11	-25°079	-23°549		11	-10°695	-55°166	
9	+60°474	+38°213				9	-45°841	-61°704				12	-24°560	-47°984		9	-10°146	-14°039	
9	+60°723	+11°454				14	-45°814	-63°609	66	818	9°0	16	-24°447	-6°542	66°	11	-9°391	-45°857	835

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531					591					651					711			
14	- 9°191	-51°925			9	+10°268	-33°961			11	+28°535	-39°884			11	+46°681	-22°459		
9	- 9°125	-54°287			11	+10°362	- 3°001			12	+28°796	-10°550			10	+47°024	-42°128		
9	- 8°850	-25°584			11	+11°528	-29°590			9	+28°870	-12°642			9	+47°576	-40°590		
10	- 8°602	-20°747			9	+11°943	- 0°958			9	+29°033	-21°014			9	+47°761	- 9°017		
12	- 8°602	-32°947			10	+12°338	-51°249			11	+29°130	- 8°272			9	+48°381	-57°216		
								66° 856	9°6										
9	- 8°419	-39°659			16	+12°564	-38°319			9	+29°349	-62°566			9	+48°759	-46°341		
9	- 8°012	- 9°284			9	+12°715	-61°680			9	+29°628	- 6°337			18	+48°848	-37°392	66° 875	9°5
10	- 7°928	-62°739			9	+12°748	-12°353			10	+29°795	-24°691			11	+49°348	- 3°265		
9	- 7°835	-44°170			10	+12°988	-27°238			20	+29°921	-41°575	66° 864	9°4	9	+49°654	-35°625		
14	- 7°833	-56°686	66° 843	10°0	9	+13°169	-43°971			9	+29°971	-59°150			9	+49°954	-32°799		
	541					601					661					721			
9	- 7°106	-33°655			9	+13°554	-64°443			16	+30°157	-22°574	66° 862	10°0	9	+50°150	- 7°363		
11	- 7°042	- 9°383			9	+13°827	-39°613			16	+30°184	-23°825	66° 863	10°0	22	+50°334	-42°013	66° 876	9°2
9	- 6°676	-62°844			9	+13°982	-47°979			14	+30°229	-51°819			10	+50°472	-42°129		
16	- 6°410	-27°547	66° 844	10°0	9	+14°349	-29°848			11	+30°289	- 6°403			10	+50°492	-60°092		
9	- 5°650	-60°667			10	+14°392	-28°606			12	+30°499	-13°003			12	+50°997	-23°725		
11	- 5°016	- 3°290			11	+14°538	- 6°187			18	+31°560	-21°041	66° 865	9°2	19	+51°260	- 2°124	65° 973	9°4
10	- 4°672	-21°100			20	+14°547	-62°261	66° 857	9°2	9	+32°124	-56°705			14	+52°070	-62°728	66° 878	9°8
9	- 4°621	-48°124			9	+14°677	- 9°119			14	+32°431	-19°266			9	+52°446	- 4°533		
19	- 4°505	-59°211	66° 845	9°2	10	+15°230	-20°412			9	+32°621	-54°657			16	+52°483	-54°721	66° 879	9°6
10	- 4°402	- 6°578			9	+15°287	-10°806			9	+32°772	-48°800			26	+52°840	-11°677	66° 877	8°4
	551					611					671					731			
9	- 4°358	-22°279			11	+15°864	-60°404			10	+32°888	-56°618			9	+52°933	-45°063		
10	- 2°864	- 6°951			9	+15°901	-47°585			10	+33°535	- 8°601			11	+53°029	-38°753		
10	- 2°680	-42°124			15	+16°063	-35°778			16	+33°711	-26°933	66° 866	9°8	10	+53°945	- 3°585		
9	- 2°607	-25°359			9	+16°092	- 4°293			18	+33°851	- 3°193	65° 957	9°4	27	+54°618	-11°869	66° 880	8°6
12	- 2°482	-47°348			14	+17°300	- 4°609			15	+34°065	-23°201			17	+54°715	-16°971		
17	- 1°495	-34°605	66° 846	9°6	9	+18°069	- 1°117			9	+34°211	-14°501			15	+55°716	- 0°989		
9	- 1°244	-20°995			11	+18°115	-42°191			9	+34°289	- 9°303			9	+56°365	- 7°572		
9	- 0°979	- 5°696			19	+18°253	-26°836	66° 858	9°2	10	+34°476	-56°285			9	+56°541	-46°125		
20	- 0°571	-27°897	66° 847	9°2	9	+19°074	-32°599			9	+34°524	-41°727			19	+57°563	- 5°375	65° 974	9°4
20	- 0°389	-19°641	66° 848	9°2	9	+19°189	-56°887			10	+35°579	-13°682			9	+57°630	- 1°857		
	561					621					681					741			
12	+ 0°233	-52°635			11	+19°248	-49°197			9	+35°730	-22°835			20	+58°663	-52°331	66° 881	9°2
9	+ 0°777	-37°185			9	+19°402	-23°681			9	+36°366	-41°931			30	+59°704	-60°600	66° 883	8°9
9	+ 0°866	- 3°796			11	+19°703	-35°030			10	+36°394	-41°360			24	+60°695	-17°115	66° 882	9°2
9	+ 0°999	-21°415			9	+20°222	- 9°550			9	+36°450	-36°351			10	+60°711	- 4°458		
11	+ 1°043	-21°489			10	+20°284	-16°514			36	+36°606	-32°308	66° 867	7°8	9	+60°824	-37°877		
9	+ 2°973	-23°287			9	+20°376	-12°856			9	+37°500	-54°254			9	+60°928	- 6°510		
11	+ 3°028	- 6°783			15	+20°483	-19°526			11	+37°594	-41°401			10	+60°966	-12°057		
9	+ 3°034	-24°253			10	+20°978	-25°822			16	+37°588	-23°921	66° 868	9°9	9	+62°040	-49°404		
10	+ 3°099	-15°081			9	+21°600	-48°305			14	+37°806	-44°214			9	+62°141	- 0°483		
11	+ 3°597	-23°287			10	+21°814	-60°241			15	+37°967	-29°114	66° 869	10°0	9	+62°342	- 1°202		
	571					631					691					751			
10	+ 4°047	- 6°577			19	+21°823	-50°535	66° 859	9°2	9	+38°607	-54°800			9	+62°771	-53°953		
15	+ 4°266	- 2°808	65° 934	10°0	9	+21°865	-46°042			9	+38°670	-47°174			28	+63°094	- 2°012	65° 977	8°2
20	+ 4°277	-54°378	66° 849	9°2	10	+22°082	-11°590			9	+38°986	-41°544			16	+64°912	- 6°930	66° 884	9°8
16	+ 5°138	-10°422	66° 850	10°0	9	+22°131	-21°531			10	+39°674	- 5°275							
11	+ 5°172	-58°387			13	+22°810	-43°382			12	+39°756	-60°154	66° 870	10°0					
9	+ 5°343	-19°383			9	+22°903	-62°516			9	+40°602	-33°607							
9	+ 5°491	-48°711			9	+23°424	-45°943			13	+41°020	-31°838							
18	+ 5°796	-55°684	66° 851	9°5	10	+23°679	-52°447			11	+41°692	- 1°695							
9	+ 5°797	-14°340			9	+23°726	-10°470			15	+41°833	-53°448	66° 871	9°6					
11	+ 5°867	-60°494			10	+24°644	-30°633			16	+41°939	- 1°057	65° 964	10°0					
	581					641					701								
9	+ 6°704	- 8°020			16	+25°367	-48°849	66° 860	9°6	9	+42°602	- 1°341							
18	+ 6°939	- 6°713	66° 852	9°2	12	+25°380	-52°731			17	+43°387	- 6°091	66° 872	9°5					
17	+ 7°062	-39°791	66° 853	9°8	9	+25°449	- 8°699			12	+43°525	-19°313							
10	+ 8°047	-34°075			11	+25°560	- 4°786			11	+44°256	-12°118							
9	+ 8°181	- 3°846			9	+26°035	-21°960			18	+44°811	-18°604	66° 873	9°4					
9	+ 8°991	- 0°301			9	+26°261	-36°153			10	+45°206	-36°165							
10	+ 9°106	-22°977			11	+26°830	-26°854			14	+45°960	-43°040	66° 874	10°0					
11	+ 9°513	-22°275			9	+26°989	-48°898			9	+46°153	-29°342							
16	+ 9°910	-39°263	66° 854	10°0	11	+28°189	-49°275			10	+46°209	-12°648							
14	+ 9°948	-58°017	66° 855	10°0	46	+28°428	-48°943	66° 864	7°5	10	+46°510	-40°799							

C.P.D.					C.P.D.					C.P.D.					C.P.D.						
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.		
PLATE CENTRE. 8h 42m, - 66°. Plate 625. 1893, Feb. 16. PROVISIONAL CONSTANTS. a = - 0.01172 d = + 0.00008 b = - 0.00023 e = - 0.01144 c = - 0.0180 f = - 0.5628 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																					
18	-64.940	+34.775	65 971	9.2	51	10	-25.017	+25.171		111	15	+6.089	+11.343	65 1012	10.0	171	9	+35.693	+40.812		
9	-64.702	+46.101			10	9	-24.692	+5.782		11	11	+6.661	+15.009			9	+35.863	+39.469			
10	-62.984	+25.513			9	9	-24.690	+31.216		50	10	+7.026	+33.122	65 1013	6.5	24	+36.099	+49.342	65 1029	8.7	
9	-62.921	+28.501			11	11	-24.665	+22.427		10	10	+7.266	+30.790			9	+37.105	+27.779			
11	-61.302	+3.072	65 972	10.0	10	10	-24.044	+13.176		11	11	+7.291	+47.288			12	+37.667	+41.206	65 1031	10.0	
11	-61.266	+32.708			11	11	-24.026	+52.800		11	11	+7.803	+36.629			15	+37.717	+42.777	65 1030	10.0	
11	-61.065	+16.880			12	12	-23.260	+13.712	65 988	10.0	32	12	+7.847	+41.146	65 1014	8.5	14	+37.732	+28.300	65 1032	9.6
9	-59.473	+24.611			9	9	-23.000	+33.812		11	11	+8.935	+14.551			9	+37.755	+51.360			
9	-58.526	+26.317			10	10	-22.423	+8.025		10	10	+10.858	+60.523			9	+37.828	+28.143			
9	-58.020	+15.391			11	11	-21.719	+20.684		11	11	+11.501	+32.152			24	+37.896	+16.465	65 1033	9.1	
11	-54.674	+49.330			20	20	-21.648	+17.779	65 989	9.2	10	10	+12.365	+28.206			12	+38.388	+42.397		
24	-53.464	+18.961	65 975	9.2	10	10	-20.761	+12.312		27	10	+12.689	+15.635	65 1015	9.0	9	+38.478	+6.364			
10	-52.464	+49.080			14	14	-20.424	+50.686	65 990	9.7	9	9	+12.811	+12.322			12	+39.000	+12.403	65 1034	10.0
12	-51.403	+29.578	65 976	10.0	12	12	-20.002	+24.446	65 991	10.0	10	10	+12.827	+23.475			11	+40.521	+16.355		
9	-51.137	+12.284			11	11	-19.347	+34.318		11	11	+13.046	+26.746			11	+40.696	+43.468			
9	-50.406	+19.661			12	12	-19.300	+28.195	65 992	10.0	9	9	+13.283	+29.889			19	+40.772	+0.253	65 1035	9.3
13	-45.109	+20.113	65 978	10.0	11	11	-18.509	+26.462	65 993	10.0	13	13	+13.295	+34.903	65 1016	10.0	9	+41.016	+52.097		
10	-44.121	+36.965			13	13	-18.008	+1.823	65 994	10.0	11	11	+13.308	+63.596	64 937	9.8	12	+41.316	+14.497		
24	-44.049	+48.547	65 979	9.2	11	11	-17.856	+46.878		10	10	+13.318	+6.000			10	+41.351	+45.030			
16	-42.990	+22.496	65 980	9.5	30	30	-17.191	+41.927	65 995	8.7	16	16	+13.650	+22.252	65 1017	9.4	9	+41.735	+47.046		
11	-42.942	+36.460			15	15	-17.185	+43.703	65 996	10.0	11	11	+14.282	+8.724			10	+41.864	+9.413		
10	-42.588	+2.453			13	13	-16.194	+53.481	65 999	10.0	9	9	+14.410	+17.056			11	+42.364	+4.775		
11	-42.553	+46.307			22	22	-16.078	+10.073	65 998	9.1	18	18	+14.646	+42.445	65 1018	9.4	11	+43.187	+34.917		
28	-41.949	+44.784	65 981	9.1	9	9	-15.486	+3.021		28	28	+15.407	+0.093	65 1019	8.9	11	+43.379	+34.142			
9	-40.851	+46.954			15	15	-15.386	+16.381	65 1000	9.3	18	18	+15.824	+13.279	65 1020	9.5	12	+43.690	+19.363	65 1037	10.0
12	-38.927	+34.167			16	16	-15.217	+33.730	65 1002	9.4	9	9	+16.284	+31.712			12	+43.947	+28.687		
9	-38.379	+2.975			9	9	-15.109	+55.835		12	12	+16.672	+36.795			14	+44.412	+4.509	65 1038	10.0	
11	-38.317	+51.793	65 982	10.0	10	10	-14.651	+50.332		13	13	+17.892	+5.726	65 1021	9.5	10	+44.642	+5.842			
11	-37.947	+33.089			9	9	-14.057	+27.677		12	12	+18.433	+20.150	65 1022	10.0	10	+44.826	+51.171			
10	-37.863	+16.697			11	11	-13.842	+31.298		10	10	+18.522	+10.470			9	+45.704	+57.872			
10	-37.361	+26.870			81	9	-13.583	+33.242		17	17	+19.065	+18.003	65 1023	9.4	22	+45.937	+36.061	65 1039	9.0	
10	-37.089	+25.070			10	10	-13.268	+39.652		15	15	+20.320	+15.414	65 1024	9.6	11	+46.069	+42.416			
11	-36.127	+60.269			20	20	-13.163	+35.154	65 1003	9.1	15	15	+20.972	+21.388	65 1025	9.5	10	+46.364	+27.729		
10	-33.904	+37.842			11	11	-12.948	+17.417		9	9	+21.302	+17.033			10	+46.921	+34.089			
11	-32.348	+3.005			20	20	-11.816	+6.245	65 1004	9.2	9	9	+22.724	+38.075			25	+46.964	+45.896	65 1040	9.2
14	-31.858	+12.747	65 983	9.9	12	12	-11.622	+12.565	65 1005	10.0	11	11	+22.813	+41.215			12	+47.580	+17.115	65 1041	10.0
10	-31.352	+10.850			9	9	-11.622	+52.297		10	10	+23.163	+26.582			10	+47.620	+8.221			
13	-31.346	+32.645	65 984	10.0	16	16	-10.782	+5.322	65 1006	9.0	10	10	+24.726	+1.964			12	+47.696	+25.161		
12	-30.465	+47.709			11	11	-10.555	+12.059		9	9	+24.929	+36.028			10	+47.757	+10.520			
10	-30.142	+0.770			9	9	-10.136	+59.243		10	10	+26.128	+58.496			11	+48.595	+48.810			
16	-30.104	+50.849	65 985	9.6	91	9	-9.841	+12.531		14	14	+27.145	+21.222	65 1026	9.6	9	+48.661	+37.771			
10	-30.016	+35.183			14	14	-7.759	+37.540	65 1007	10.0	9	9	+28.479	+52.048			19	+48.963	+4.772	65 1042	9.3
14	-28.735	+9.850	65 986	9.9	11	11	-7.673	+46.140		13	13	+28.494	+14.824	65 1027	10.0	12	+49.327	+11.316			
9	-27.429	+0.369			9	9	-7.541	+34.800		10	10	+28.832	+26.079			9	+49.515	+3.087			
9	-27.364	+37.197			9	9	-7.526	+42.013		10	10	+29.056	+25.243			11	+49.637	+40.183			
9	-27.307	+33.143			10	10	-6.567	+19.131		12	12	+29.178	+40.893			11	+50.345	+20.105			
11	-27.207	+32.787			10	10	-6.510	+54.525		9	9	+29.445	+32.397			13	+51.827	+15.761	65 1044	10.0	
27	-26.758	+9.288	65 987	8.9	36	36	-5.394	+29.020	65 1008	8.0	10	10	+30.313	+12.238			22	+52.449	+39.092	65 1043	9.4
11	-25.481	+30.374			15	15	-5.352	+36.790	65 1009	9.7	9	9	+30.370	+33.662			11	+52.555	+18.501		
9	-25.179	+52.284			10	10	-3.274	+17.309		34	34	+31.080	+57.393	64 946	8.1	13	+53.651	+36.772			
					101	10	-2.004	+7.154		161	9	+32.438	+44.533			9	+53.840	+54.243			
					10	10	-1.697	+5.483		9	9	+32.635	+42.543			9	+54.017	+12.097			
					10	10	-0.536	+2.581		15	15	+33.022	+46.693	65 1028	10.0	9	+54.061	+46.704			
					9	9	+0.242	+60.279		11	11	+33.775	+17.017			9	+55.635	+22.777			
					10	10	+0.839	+57.791		12	12	+34.340	+63.160			11	+55.949	+46.797			
					9	9	+2.572	+18.935		9	9	+34.452	+63.383			11	+56.911	+0.520			
					13	13	+2.848	+45.487	65 1010	9.4	9	9	+34.623	+15.209			9	+57.211	+50.627		
					14	14	+5.170	+41.249		24	24	+34.794	+63.405	64 949	8.9	11	+57.485	+59.093	64 964	9.6	
					14	14	+5.225	+23.396	65 1011	9.6	9	9	+35.657	+8.380			9	+58.363	+29.003		
					9	9	+5.243	+16.719		10	10	+35.689	+36.927			15	+58.883	+13.800	65 1045	10.0	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
18	231 +59°635	+54°705	64	966	9°2	10	291 -26°394	-6°716		17	351 +5°883	-49°465	66	909	9°2	14	411 +35°286	-63°548	66	922	9°6		
9	+61°792	+27°219				14	-25°793	-22°621	66	892	9°6	13	+6°480	-16°567	66	910	9°6	15	+37°084	-20°958	66	923	9°6
9	+62°461	+33°487				9	-25°593	-57°714		10	+8°480	-56°175	9	+8°851	-63°125	9	+37°599	-0°910					
16	-64°898	-18°821	66	873	9°4	11	-24°313	-1°236		9	+8°851	-63°125	9	+37°889	-25°579	9	+37°889	-25°579					
10	-61°999	-43°113	66	874	10°0	10	-23°065	-39°978		11	+9°024	-28°009	9	+38°706	-44°780	9	+38°706	-44°780					
9	-61°435	-3°197				9	-22°719	-7°335		12	+10°037	-31°512	66	911	10°0	12	+39°364	-7°082					
9	-60°996	-42°106				9	-22°423	-57°774		10	+10°552	-51°023	10	+39°704	-35°620	10	+39°704	-35°620					
13	-59°616	-1°920	65	973	9°4	13	-21°749	-24°433	66	893	9°8	9	+11°732	-37°306	9	+39°784	-44°377	66	924	9°2			
14	-59°520	-37°273	66	875	9°5	10	-21°427	-26°842		9	+12°002	-58°111	9	+40°304	-44°756	9	+40°304	-44°756					
10	-58°343	-23°487				9	-20°677	-4°554		13	+12°250	-17°903	66	912	10°0	10	+40°435	-27°843					
	241						301				361						421						
16	-57°698	-41°777	66	876	9°2	9	-20°253	-17°593		9	+14°523	-64°723	9	+40°859	-26°878	9	+40°859	-26°878					
9	-57°552	-41°865				11	-19°998	-7°853	66	894	10°0	12	+14°725	-24°721	11	+41°059	-45°492						
27	-57°374	-11°329	66	877	8°4	11	-19°327	-15°020	66	895	10°0	9	+15°509	-6°284	14	+41°396	-4°459	65	1036	9°6			
27	-55°571	-11°411	66	880	8°6	9	-18°682	-54°710		9	+16°727	-53°057	9	+42°040	-4°207	12	+42°040	-4°207					
9	-55°250	-38°340				9	-17°383	-11°841		20	+17°086	-10°809	66	913	9°3	12	+42°609	-1°231					
9	-55°250	-0°471				9	-17°185	-20°103		10	+17°201	-6°899				11	+42°622	-8°278					
10	-54°937	-44°604				22	-16°971	-25°587	66	896	8°9	9	+18°081	-39°827	13	+42°842	-10°151						
13	-54°678	-54°302	66	879	9°6	9	-16°875	-27°735		9	+18°450	-19°612	9	+43°323	-17°788	9	+43°323	-17°788					
11	-54°515	-62°298	66	878	9°8	12	-16°688	-1°193	65	997	10°0	15	+18°492	-19°862	66	914	9°6	24	+43°327	-58°203	66	928	8°8
13	-53°121	-4°717	65	974	9°4	11	-16°586	-28°472	66	897	10°0	10	+18°692	-63°870	10	+43°405	-16°556	66	925	10°0			
	251						311				371						431						
9	-50°058	-3°581				10	-15°209	-31°277		10	+18°760	-28°251	10	+43°597	-25°693	10	+43°597	-25°693					
9	-49°245	-11°138				20	-15°167	-2°877	65	1001	8°8	9	+19°013	-31°833	18	+43°663	-19°267	66	926	9°3			
18	-49°145	-16°196	66	882	9°2	10	-15°069	-48°441		30	+19°732	-9°808	66	915	8°0	9	+43°730	-5°234					
18	-48°670	-51°465	66	881	9°2	26	-14°304	-31°011	66	898	8°7	9	+19°763	-58°844	60	+43°899	-25°564	66	927	5°9			
9	-48°637	-0°212				11	-14°244	-46°256		12	+19°777	-47°737	10	+44°363	-12°237	10	+44°363	-12°237					
9	-47°535	-36°901				9	-13°528	-56°249		9	+22°095	-26°175				11	+45°063	-40°588					
24	-47°072	-59°652	66	883	8°9	12	-12°881	-46°015		9	+23°430	-4°222	9	+45°725	-1°114	9	+45°725	-1°114					
28	-46°916	-0°910	65	977	8°2	52	-12°684	-27°248	66	899	6°5	9	+23°777	-39°613	11	+46°552	-13°168						
13	-45°669	-5°742	66	884	9°8	13	-12°588	-16°712	66	900	9°9	10	+24°050	-18°083	12	+46°591	-61°262	66	929	10°0			
10	-45°532	-48°308				9	-12°235	-16°111		10	+24°628	-48°281	9	+47°100	-9°022	9	+47°100	-9°022					
	261						321				381						441						
13	-44°902	-14°516	66	885	9°8	9	-12°084	-27°789		9	+25°106	-2°531	14	+48°363	-40°605	66	930	9°9					
10	-44°763	-8°805				9	-11°882	-55°631		9	+25°356	-38°819	24	+48°550	-37°002	66	931	8°7					
9	-44°470	-52°805				9	-11°781	-38°967		11	+25°539	-24°449	13	+48°646	-63°824	66	932	9°5					
10	-43°952	-11°736				9	-9°810	-10°847		9	+25°710	-57°455	10	+48°920	-56°533	10	+48°920	-56°533					
18	-43°116	-34°740	66	886	9°2	9	-9°439	-50°753		10	+25°732	-41°661	10	+49°248	-36°891								
10	-41°450	-49°381				10	-8°492	-52°664		12	+26°496	-30°038	9	+49°929	-27°081	9	+49°929	-27°081					
10	-41°329	-15°017				10	-7°096	-26°205	66	901	10°0	10	+27°012	-21°544	9	+50°101	-7°661						
9	-40°750	-28°904				10	-6°977	-28°963	66	902	10°0	9	+27°323	-17°343	9	+50°147	8°107						
11	-38°982	-41°072				10	-5°900	-35°369		9	+28°006	-57°018	9	+50°414	-14°825	9	+50°414	-14°825					
12	-38°508	-19°926	66	889	10°0	10	-3°627	-43°980		11	+28°020	-4°585	9	+50°776	-1°709	9	+50°776	-1°709					
	271						331				391						451						
10	-38°383	-20°934				9	-3°027	-40°598		10	+28°112	-41°176	9	+51°170	-49°008	9	+51°170	-49°008					
26	-38°332	-54°857	66	887	8°8	9	-2°539	-37°104		13	+28°739	-59°131	66	916	9°5	10	+51°546	-21°609					
12	-37°929	-56°248	66	888	9°6	16	-1°335	-25°774	66	903	9°3	11	+29°529	-33°781	10	+51°641	-29°199	66	933	10°0			
9	-37°515	-9°777				11	-1°282	-42°786		11	+30°209	-13°363	9	+51°775	-20°303	9	+51°775	-20°303					
10	-36°907	-46°270				9	-0°677	-21°932		14	+30°262	-39°312	66	917	9°8	9	+52°540	-10°071					
13	-36°685	-16°123	66	890	10°0	9	+0°510	-58°417		11	+30°425	-3°983	9	+52°848	-37°731	9	+52°848	-37°731					
9	-36°178	-6°193				9	+1°074	-39°062		9	+30°576	-36°759	9	+53°209	-31°220	9	+53°209	-31°220					
9	-34°848	-51°587				10	+1°180	-57°715		9	+30°618	-28°208	9	+53°368	-13°839	9	+53°368	-13°839					
9	-34°418	-1°532				10	+1°696	-18°263		9	+30°618	-28°961	9	+53°818	-13°374	9	+53°818	-13°374					
9	-34°200	-44°468				12	+1°923	-27°349	66	904	9°7	9	+31°468	-9°440	10	+5							

[illegible]

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	Mag.	Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.								No.	Mag.
	171					231					291		10.0		351			
18	+31.812	+13.415	65 1078	9.1	10	-51.087	-47.122	66 934	10.0	14	-23.817	-35.742	6	10	+4.604	-34.259		
9	+32.404	+60.546			10	-51.048	-24.579			9	-23.694	-41.915		9	+4.630	-37.690		
20	+32.468	+14.697	65 1079	8.9	9	-50.627	-52.380			10	-23.208	-8.094		10	+4.667	-63.718		
10	+32.657	+28.214			10	-49.589	-57.673	66 935	9.6	9	-22.991	-4.515		19	+4.826	-10.818	66 961	9.4
24	+33.831	+54.945	64 1004	8.6	15	-49.152	-6.040	65 1046	10.0	9	-21.970	-37.114			+5.261	-50.548		
														15	+6.038	-11.083	66 962	10.0
9	+34.164	+23.363			9	-48.293	-29.135			11	-20.676	-55.833		9	+7.681	-15.895		
9	+34.676	+11.599			9	-47.413	-32.217			9	-20.448	-6.151		13	+8.219	-15.705		
17	+34.787	+1.167	65 1080	9.2	20	-46.708	-14.605	66 936	9.2	9	-20.115	-56.571		21	+8.394	-57.652	66 964	9.2
9	+35.091	+8.043			17	-45.614	-16.776	66 937	10.0	9	-18.823	-13.959	8.4	10	+9.013	-28.226		
9	+35.132	+48.168			23	-44.978	-19.234	66 939	8.9	27	-18.766	-16.920	6					
	181					241					301				361			
15	+36.058	+40.073	65 1081	9.3	32	-44.842	-26.194	66 938	8.5	9	-18.711	-51.098		24	+9.309	-61.195	66 965	8.9
9	+36.167	+11.453			18	-42.331	-5.566	65 1049	9.2	11	-18.427	-49.823		9	+10.726	-1.604		
9	+36.342	+4.023			10	-42.054	-46.279			14	-18.247	-30.389		10	+11.208	-51.834		
9	+36.669	+4.973			13	-41.987	-13.765			10	-17.981	-45.965		9	+11.438	-10.898		
17	+37.751	+8.839	65 1082	9.5	11	-41.792	-38.790			9	-17.680	-64.138		9	+11.569	-8.914		
9	+39.865	+41.320			15	-41.677	-1.048	65 1051	10.0	12	-16.245	-40.036		20	+11.875	-50.208	66 966	9.4
9	+39.959	+16.447			11	-41.585	-12.707			9	-15.987	-4.916		10	+11.975	-58.963		
9	+40.464	+33.158			18	-41.529	-1.530	65 1052	9.6	9	-15.047	-28.349		17	+12.990	-28.238	66 967	9.5
9	+42.057	+12.496			12	-41.128	-8.731			9	-15.047	-28.349		9	+13.147	-8.926		
9	+42.238	+12.328			9	-40.818	-13.445			9	-14.856	-0.476	9.5	18	+13.323	-0.444	65 1071	9.3
	191					251				18	-14.305	-32.716	66		371			
9	+42.462	+16.756			9	-40.454	-20.458			9	-14.236	-32.278		9	+13.396	-28.701		
9	+42.757	+10.681			9	-40.229	-6.510			9	-13.910	-49.022		9	+13.448	-13.572		
12	+44.284	+46.154	65 1083	9.5	15	-39.993	-41.083	66 940	9.6	10	-13.883	-31.624		10	+13.500	-32.933		
9	+45.008	+24.137			9	-39.630	-20.463			9	-13.766	-15.089		20	+13.747	-41.950	66 968	9.2
9	+45.177	+56.802			9	-39.254	-31.348			9	-13.358	-17.407		9	+14.016	-53.498		
9	+45.941	+17.379			9	-38.450	-42.498			9	-13.163	-21.648		18	+14.316	-39.849	66 969	9.4
18	+45.976	+33.735	65 1084	9.2	14	-37.686	-45.524	66 941	10.0	12	-12.296	-19.653		10	+15.211	-47.634		
9	+46.011	+13.252			9	-37.495	-47.544			10	-11.414	-26.339		9	+15.445	-7.054		
9	+48.530	+21.900			9	-37.299	-21.538			10	-8.803	-3.476		15	+15.743	-14.930		
9	+52.007	+49.816			28	-37.234	-23.898	66 942	8.1	11	-6.862	-20.408		9	+15.921	-3.860		
	201					261					321				381			
10	+52.044	+50.428	65 1085	9.4	9	-36.782	-24.746			15	-6.774	-26.300		9	+15.977	-61.776		
9	+52.191	+17.610			10	-36.654	-38.277			10	-6.481	-52.070		9	+15.997	-58.241		
40	+53.055	+54.808	64 1008	8.0	24	-36.166	-53.878	66 943	8.7	14	-6.465	-38.771		9	+16.247	-44.387		
9	+55.127	+52.312			12	-34.965	-31.559			9	-6.392	-17.377		17	+16.321	-5.954	65 1072	9.5
9	+55.671	+37.987			9	-33.712	-1.708			12	-6.172	-0.889		9	+16.352	-62.018		
9	+55.929	+36.482			9	-33.705	-5.124			9	-4.784	-50.799		9	+16.671	-12.646		
18	+56.846	+25.014	65 1086	9.1	14	-33.570	-27.549	66 944	10.0	9	-3.979	-29.444		18	+16.848	-4.605	65 1073	9.2
9	+59.738	+21.109			9	-32.019	-38.696			9	-3.786	-19.859		9	+17.323	-42.262		
9	+60.227	+41.443			10	-30.406	-36.038			9	-3.549	-18.481		14	+17.443	-18.548		
24	+60.653	+33.561	65 1087	8.6	10	-29.944	-51.419			9	-3.448	-21.730		10	+18.046	-40.019		
	211					271					331				391			
12	+63.141	+12.468	65 1088	9.4	14	-29.687	-14.304			9	-2.818	-17.230	9.0	11	+19.485	-39.197		
9	+64.266	+33.642			18	-29.358	-27.167	66 945	9.2	22	-2.812	-56.115	66	10	+19.757	-32.059		
17	+64.353	+28.737	65 1089	9.2	22	-29.063	-39.627	66 947	8.8	9	-2.526	-25.573		13	+19.953	-18.289	66 970	9.2
15	-63.769	-59.377	66 928	8.8	18	-29.056	-41.772	66 946	9.2	10	-1.786	-42.466	6.0	13	+20.883	-43.634		
9	-63.715	-14.213			9	-28.830	-12.561			14	-1.518	-38.348	66	9	+21.099	-57.229		
9	-63.283	-41.681			10	-27.814	-9.920			12	-1.336	-50.314		20	+21.559	-49.056	66 971	9.1
9	-60.329	-62.166	66 929	10.0	11	-27.748	-15.018			9	-0.471	-51.461		12	+22.156	-39.255		
9	-60.320	-2.485			13	-27.313	-58.310	66 948	9.6	9	-0.385	-39.058	9.6	17	+22.360	-17.935	66 972	9.5
22	-60.064	-37.859	66 931	8.7	9	-27.094	-30.848			17	-0.286	-13.475	66	11	+22.839	-50.619		
10	-59.992	-41.462	66 930	9.9	18	-26.750	-4.416	65 1055	9.6	9	-0.147	-46.568		9	+23.823	-1.774		
	221					281					341				401			
9	-59.392	-37.696			10	-26.747	-2.135			9	-0.086	-36.360	8.4	21	+24.413	-13.144	66 973	9.0
9	-58.151	-22.285			9	-26.687	-62.284			27	-0.059	-24.136	66	15	+24.556	-12.955		
9	-58.070	-64.587	66 932	9.5	21	-25.841	-54.620	66 949	9.0	14	+0.100	-12.208	8.7	9	+24.971	-31.763		
9	-57.987	-10.697			9	-25.592	-17.954			24	+0.438	-19.133	66	12	+25.008	-16.491		
9	-57.490	-29.841	66 933	10.0	10	-25.426	-26.759			9	+0.752	-11.268		11	+25.293	-30.341		
9	-56.438	-13.904			9	-24.906	-11.621			9	+1.418	-35.283	9.4	9	+25.607	-44.435		
9	-52.692	-44.975			9	-24.744	-1.066			20	+2.110	-48.090	66	9	+25.943	-12.462		
9	-52.534	-18.252			13	-24.530	-11.951			10	+2.232	-41.060	8.4	13	+26.426	-8.156		
9	-51.833	-10.828			10	-23.975	-47.910			26	+2.242	-5.800	65	13	+26.818	-0.982		
9	-51.564	-27.359			9	-23.906	-35.888			9	+2.392	-28.076	10	10	+26.833	-23.059		

Diam.	x	y	C.P.D.		Diam.	C.P.D.	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.			No.	Mag.				No.	Mag.				No.	Mag.
	411														51			
9	+27°088	-11°506			28	841	66	986	8°8	9	-2°635	+31°212			9	-1°832	+41°462	
12	+27°428	-33°147			15	476	66	984	9°5	9	-1°832	+41°462			10	+0°812	+9°124	
13	+27°992	-33°069			18	392	66	988	8°9	10	+0°812	+9°124			15	+3°514	+11°116	65 1102 9°5
10	+28°153	-0°366			23	916	66	985	8°9	15	+3°514	+11°116			15	+4°152	+32°764	
9	+28°715	-44°826			9	1021					+4°152	+32°764			9	+4°892	+8°109	
					9	1022	434								9	+5°394	+12°205	
13	+28°857	-9°189				836									10	+8°064	+12°673	
9	+28°899	-54°558			11	583									18	+10°575	+54°342	64 1025 9°5
9	+28°909	-5°084			12	877	66	989	9°5						18	+10°647	+43°696	65 1104 9°2
9	+29°478	-0°930			24	1023	382	66	990	8°9								
11	+29°640	-57°388																
	421																	
9	+29°782	-1°539													11	+11°515	+39°014	
10	+30°468	-12°363													13	+15°111	+0°460	65 1105 9°5
11	+31°125	-50°062													11	+15°301	+13°239	
9	+31°405	-1°623													24	+19°030	+54°707	64 1028 8°8
9	+32°380	-32°181													18	+19°363	+13°712	65 1106 9°4
9	+32°407	-0°262													9	+19°403	+28°987	
15	+32°852	-28°688													9	+21°796	+10°898	
10	+32°907	-5°671													9	+25°546	+27°803	
10	+32°989	-21°811													10	+28°538	+12°075	
17	+33°216	-4°904													9	+29°846	+18°954	
	431																	
10	+33°282	-15°767													9	+31°687	+1°820	
9	+33°587	-9°238													9	+33°378	+5°148	
9	+34°279	-52°517													9	+34°970	+3°572	
11	+34°293	-38°944													9	+35°399	+27°381	
12	+34°425	-19°453													9	+35°703	+0°776	
11	+35°585	-32°131	66	974	9°5										14	+36°800	+15°590	
18	+35°774	-42°454													15	+37°478	+20°226	65 1107 9°5
13	+35°820	-11°768													9	+37°542	+22°451	
10	+35°847	-36°861													10	+37°714	+19°334	
9	+36°189	-37°173													9	+38°615	+29°483	
	441																	
9	+37°555	-7°120													11	+40°176	+0°658	
12	+38°170	-24°899													11	+40°266	+8°054	
9	+38°260	-9°110													9	+40°984	+31°745	
9	+38°645	-9°890													16	+42°720	+21°989	65 1108 9°5
10	+39°545	-9°170													9	+42°784	+2°145	
11	+40°039	-50°523													13	+44°132	+10°120	65 1109 9°5
10	+40°246	-56°735													9	+44°500	+8°052	
12	+40°415	-54°865													10	+44°986	+22°513	
11	+40°558	-0°453													19	+49°471	+19°653	65 1110 9°0
9	+40°673	-17°673													9	+53°063	+28°142	
	451																	
9	+41°204	-46°622													12	+53°675	+49°899	
14	+42°135	-26°433													9	+57°317	+3°871	
9	+42°747	-9°410													19	+57°888	+54°621	64 1039 9°2
9	+44°626	-16°245													11	+58°116	+41°526	
12	+45°256	-51°743	66	975	9°4										9	+58°595	+30°438	
13	+45°840	-58°489	66	976	9°4										10	+58°790	+35°086	
9	+47°593	-0°557													12	-62°009	-52°296	66 975 9°4
10	+47°856	-13°723													16	-61°336	-21°320	66 977 9°2
20	+48°182	-20°883	66	977	9°2										22	-61°329	-8°988	66 978 8°8
9	+48°775	-46°937													14	-60°920	-58°976	66 976 9°4
	461																	
28	+49°075	-8°595	66	978	8°8										13	-57°973	-35°979	66 979 9°5
15	+50°457	-35°776	66	979	9°5										12	-54°450	-59°324	66 980 9°5
11	+52°283	-59°319	66	980	9°5										14	-53°820	-35°697	66 981 9°5
9	+54°512	-44°821													12	-53°750	-37°623	66 982 9°5
13	+54°557	-37°706	66	982	9°5										21	-52°098	-28°283	66 983 8°7
14	+54°629	-35°776	66	981	9°5										12	-51°160	-15°202	
34	+56°883	-28°515	66	983	8°7										14	-50°178	-21°087	66 984 9°5
9	+57°553	-13°277													20	-49°877	-19°504	66 985 8°0
11	+58°786	-15°531													11	-49°680	-16°987	
11	+58°875	-57°490	66	987	9°5										10	-49°104	-17°369	

C.P.D.					C.P.D.					C.P.D.																															
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	Mag.																												
111														171														231													
24	-48.830	-41.413	66	986	8.8	20	+4.320	-57.381	66	1007	9.1	10	+55.679	-21.137	PLATE CENTRE.																										
18	-48.483	-40.923	66	988	8.9	10	+4.329	-28.000				15	+56.264	-51.396	9h 36m, - 66°.																										
14	-48.001	-57.017	66	987	9.5	11	+5.038	-28.722				18	+56.304	-12.052	Plate 205. 1892, March 18.																										
16	-47.346	-36.315	66	989	9.5	12	+5.909	-37.432				13	+61.098	-50.517	PROVISIONAL CONSTANTS.																										
13	-47.189	-39.007				11	+7.471	-35.179				28	+61.311	-47.537	a = - .01163 d = + .00143																										
															b = - .00154 e = - .01160																										
20	-45.005	-19.604	66	990	8.9	13	+7.686	-18.158				10	+62.335	-25.194	c = + .1114 f = - .0510																										
14	-44.523	-1.602	65	1090	9.5	10	+7.703	-38.928				12	+62.802	-22.926	To obtain standard co-ordinates, ξ, η																										
15	-41.516	-26.600	66	991	9.4	13	+8.016	-53.415				17	+63.186	-53.042	$\xi = x + ax + by + c$																										
18	-37.859	-23.718	66	993	9.0	14	+10.750	-39.428	66	1008	9.5	11	+63.641	-48.133	$\eta = y + dx + ey + f$																										
18	-37.614	-10.271	66	994	9.2	9	+10.926	-35.435																																	
121					181																																				
11	-33.206	-5.333				11	+11.036	-44.146							18 -63.193 +19.342 65 1110 9.0																										
10	-32.734	-16.263				17	+11.946	-43.906	66	1009	9.5				12 -61.126 +49.799																										
10	-31.172	-28.811				9	+12.904	-38.691							9 -60.190 +28.054																										
13	-29.368	-6.415				16	+14.579	-31.803							9 -59.819 +10.902																										
17	-29.275	-50.072	66	995	9.5	12	+15.349	-46.653							15 -57.235 +54.810 64 1039 9.2																										
9	-29.005	-9.959				10	+17.152	-27.423							11 -56.099 +41.770																										
21	-28.130	-38.063	66	996	9.0	18	+17.591	-42.223	66	1011	9.5				12 -54.978 +35.386																										
13	-26.367	-12.395				14	+18.815	-51.943							11 -54.859 +30.734																										
20	-26.037	-19.639	66	997	8.8	11	+19.255	-26.583							10 -54.248 +4.145																										
9	-25.566	-20.263				9	+20.500	-58.925							10 -51.155 +6.474																										
131					191																																				
14	-24.735	-26.074				9	+22.088	-36.264							9 -49.561 +19.570																										
19	-22.783	-61.558	66	998	8.8	18	+22.427	-36.322	66	1012	9.5				11 -46.923 +8.137																										
11	-21.917	-39.550				9	+22.447	-44.671							24 -46.292 +14.731 65 1111 9.0																										
10	-19.273	-58.247				15	+22.715	-64.597	66	1013	9.1				9 -45.090 +47.802																										
25	-18.660	-43.307	66	999	8.6	15	+22.758	-64.579							9 -44.893 +21.339																										
12	-18.182	-50.096				10	+23.205	-64.185							26 -44.460 +24.215 65 1112 9.0																										
9	-16.707	-56.961				14	+24.390	-45.568	66	1014	8.6				10 -43.000 +39.340																										
11	-16.323	-21.199				28	+25.888	-15.959							9 -42.892 +63.929																										
18	-15.158	-5.515	65	1098	9.2	9	+27.888	-11.360							9 -42.739 +17.299																										
19	-14.278	-8.332	66	1000	8.8	11	+29.042	-37.786							9 -41.408 +35.472																										
141					201																																				
11	-13.340	-56.287				11	+29.789	-55.407							21																										
9	-13.335	-16.525				11	+31.205	-34.787							13 -40.879 +23.133																										
13	-13.058	-30.677				12	+31.330	-31.590							10 -40.666 +39.732																										
14	-12.567	-53.005				19	+32.011	-23.452	66	1015	9.2				9 -40.322 +39.882																										
25	-12.316	-16.426	66	1001	8.5	10	+32.315	-13.833							12 -39.036 +21.038																										
36	-11.180	-38.246	66	1002	8.0	16	+32.431	-56.437							12 -38.899 +7.752																										
15	-10.270	-45.897				10	+32.768	-40.972							9 -37.292 +57.254																										
15	-8.610	-44.541				10	+33.414	-26.430							20 -37.140 +57.315 64 1042 8.6																										
11	-8.596	-38.348				12	+34.288	-26.175							10 -36.965 +4.218																										
12	-7.831	-15.928				9	+34.650	-38.523							9 -36.853 +7.640																										
151					211																																				
10	-5.403	-50.938				9	+35.076	-51.842							19 -36.499 +64.426 64 1043 8.9																										
13	-5.363	-23.532				12	+35.621	-29.831							31																										
13	-4.752	-55.851				11	+37.184	-19.582							10 -36.320 +34.612																										
11	-2.861	-39.126				16	+37.473	-36.403							10 -35.240 +33.552																										
14	-1.872	-1.478				12	+37.608	-4.621							9 -35.048 +21.055																										
18	-1.636	-59.072	66	1003	9.5	11	+39.654	-42.217							11 -34.950 +20.337																										
19	-1.622	-60.327	66	1004	9.5	12	+39.784	-41.167							11 -34.575 +27.128																										
21	-1.192	-61.087	66	1005	8.7	16	+40.151	-23.801							10 -34.298 +12.756																										
9	-1.153	-58.765				9	+41.081	-47.172							10 -32.989 +33.687																										
10	-0.966	-1.901				10	+41.805	-58.089							24 -32.673 +7.866 65 1114 9.1																										
161					221																																				
13	-0.436	-21.959				13	+43.724	-15.354							16 -31.853 +56.582																										
12	-0.147	-39.811				14	+44.102	-62.531	66	1016	7.8				12 -31.440 +21.933																										
10	+0.045	-44.154				31	+45.054	-9.036							41																										
9	+0.341	-15.140				12	+47.245	-60.810							9 -29.308 +41.036																										
15	+0.372	-46.209				14	+47.452	-60.874	66	1017	9.4				9 -28.511 +25.541																										
9	+0.587	-3.144				10	+48.947	-10.499							12 -27.637 +25.588																										
11	+0.777	-17.732				10	+49.490	-7.340	66	1018	6.6				9 -25.318 +1.840																										
13	+1.511	-60.993				52	+52.268	-17.009							9 -23.281 +28.178																										
20	+2.683	-42.001	66	1006	9.2	10	+54.500	-20.519							9 -23.118 +0.447																										
32	+4.004	-3.858	65	1103	7.7	19	+55.435	-20.651	66	1019	9.0				40 -22.915 +19.615 65 1115 7.5																										

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
14	-21°301	+47°830			9	+8°223	+38°848			10	+38°749	+47°229			14	-44°393	-52°226	66 1023	9°5
12	-20°833	+2°230			16	+9°092	+39°605			9	+39°217	+37°702			11	-44°295	-47°278		
9	-19°700	+18°121			9	+9°639	+3°470			13	+39°622	+33°467	65 1139	9°6	10	-44°094	-29°900		
11	-19°662	+9°285			18	+11°347	+9°001	65 1121	9°5	9	+39°737	+48°719			9	-41°860	-43°860		
10	-19°115	+6°640			9	+12°351	+15°274			9	+39°987	+31°639			30	-41°358	-55°821	66 1024	8°5
					9	+12°451	+49°715			9	+40°102	+11°735			10	-40°508	-48°702		
10	-17°635	+28°727			9	+13°703	+14°661			11	+40°195	+41°928	65 1140	9°9	14	-40°488	-19°460		
14	-17°356	+37°164			11	+14°105	+29°423			9	+40°210	+26°298			48	-39°564	-17°187	66 1025	8°0
14	-17°015	+31°500			13	+14°162	+48°903			10	+40°426	+15°927			14	-39°375	-31°912		
11	-16°503	+10°298			9	+14°543	+9°490			10	+40°501	+17°866			9	-39°070	-31°411		
12	-15°978	+58°423				121					181					241			
	61				22	+14°961	+23°489	65 1122	9°2	11	+40°512	+27°484	65 1141	9°9	11	-38°722	-59°652		
11	-15°301	+23°485			14	+15°557	+46°935			9	+41°694	+19°272			13	-38°180	-40°131		
12	-14°732	+12°306			9	+15°563	+63°152			17	+42°879	+12°765	65 1143	9°5	19	-37°472	-5°618	65 1113	9°1
9	-14°450	+40°289			10	+16°009	+9°876			22	+43°021	+15°501	65 1144	9°2	11	-37°024	-5°516		
11	-14°192	+37°728			9	+16°545	+48°802			11	+43°068	+5°357			9	-36°661	-37°950		
13	-13°444	+8°476																	
					19	+16°700	+29°693	65 1123	9°5	32	+44°741	+20°376	65 1145	8°7	9	-36°473	-58°839		
9	-13°217	+11°802			9	+16°897	+7°228			10	+44°841	+28°212			10	-36°468	-34°843		
14	-13°005	+41°606			9	+17°081	+34°057			10	+45°487	+16°929			10	-36°270	-8°686		
16	-12°998	+58°211			39	+17°803	+22°659	65 1124	8°2	28	+45°966	+13°373	65 1146	9°1	11	-36°265	-40°316		
15	-12°192	+0°710			9	+18°007	+1°642			9	+46°272	+50°405			16	-36°076	-9°428		
13	-12°007	+45°778				131					191					251			
	71				24	+18°578	+35°949	65 1126	9°5	9	+47°698	+45°683			15	-35°481	-54°074	66 1026	9°2
10	-11°996	+19°899			10	+18°753	+2°423			9	+48°580	+22°568			12	-35°403	-32°851		
15	-10°739	+50°513			9	+19°021	+53°826			11	+50°201	+44°371	65 1147	9°6	16	-35°139	-53°232	66 1027	9°1
11	-10°134	+18°896	65 1117	9°3	14	+19°779	+25°375	65 1127	9°6	9	+52°373	+9°871			17	-34°414	-23°953	66 1028	9°5
18	-10°007	+2°100			10	+20°259	+40°278			11	+52°539	+23°538			11	-30°143	-54°746		
10	-9°487	+21°889																	
					11	+20°465	+54°990			9	+52°647	+13°016			11	-30°100	-8°207		
15	-9°430	+48°482			12	+20°585	+28°858			9	+53°870	+57°025			11	-29°377	-18°332		
10	-9°228	+63°239			10	+21°137	+48°396			10	+54°080	+9°859	65 1151	9°9	10	-29°318	-2°892		
11	-8°406	+45°983			11	+21°832	+60°289	64 1056	9°6	11	+54°551	+39°269	65 1150	9°6	10	-29°144	-23°571		
10	-7°798	+43°406			17	+22°521	+2°232	65 1129	9°4	15	+56°257	+19°173	65 1153	9°5	9	-27°226	-23°602		
36	-7°742	+2°486	65 1118	7°8		141					201					261			
	81				12	+23°541	+7°579			18	+56°965	+15°870	65 1154	9°2	15	-26°536	-22°011		
13	-6°583	+17°293			9	+23°803	+2°247			12	+57°763	+35°519	65 1155	9°5	12	-25°234	-13°617		
9	-5°364	+55°123			9	+24°496	+44°274			14	+58°652	+4°585	65 1156	9°5	10	-25°140	-3°118		
9	-5°044	+21°741			9	+24°601	+7°977			11	+60°662	+27°838	65 1157	9°9	10	-24°317	-14°905		
10	-4°942	+27°042			10	+25°808	+42°180			12	+61°042	+5°510	65 1160	9°8	11	-23°273	-20°025		
12	-4°814	+23°176																	
					10	+26°431	+58°457	64 1060	9°9	11	+61°083	+8°104	65 1159	9°9	11	-22°305	-35°259		
14	-2°874	+18°111			9	+26°671	+45°790			12	+61°990	+49°856	65 1158	9°5	10	-21°577	-29°253		
13	-2°748	+34°922			16	+27°099	+3°669	65 1131	9°4	15	+62°817	+16°000	65 1161	9°5	9	-20°747	-31°390		
12	-1°492	+19°263			22	+27°585	+57°407	64 1061	9°1	10	-62°749	-63°060			11	-19°638	-39°892		
15	-1°377	+38°748			16	+28°258	+19°305	65 1132	9°4	9	-61°569	-10°767			17	-17°652	-37°008	66 1029	9°4
9	-1°239	+1°132				151					211					271			
	91				10	+29°215	+24°514			9	-61°253	-7°601			10	-17°071	-10°143		
20	+0°012	+12°972	65 1120	9°4	13	+29°782	+15°283	65 1133	9°5	10	-59°760	-61°097			11	-16°848	-20°003		
11	+0°081	+19°421			9	+30°049	+26°679			12	-59°555	-61°156	66 1017	9°4	11	-15°485	-46°863		
11	+0°370	+3°561			10	+30°505	+36°284			64	-57°834	-17°061	66 1018	6°6	11	-15°356	-41°076		
10	+1°035	+27°976			24	+30°577	+28°161	65 1134	9°1	10	-55°328	-20°396			12	-13°608	-12°297		
9	+1°342	+11°391																	
					13	+31°025	+23°645	65 1135	9°9	20	-54°414	-20°450	66 1019	9°0	12	-13°198	-23°284		
9	+2°952	+28°270			9	+31°231	+1°761			11	-54°140	-20°936			15	-12°646	-50°488		
10	+3°076	+14°296			18	+31°400	+15°063	65 1136	9°4	16	-54°131	-11°815	66 1020	9°4	17	-12°634	-50°382	66 1030	8°8
17	+3°482	+43°997			9	+32°206	+23°099			9	-52°354	-51°751			9	-11°510	-57°649		
9	+3°554	+2°538			9	+33°943	+46°545			12	-51°414	-51°066			11	-9°692	-19°541		
9	+3°603	+2°312				161					221					281			
	101				10	+34°080	+3°031			11	-50°650	-26°766			10	-9°500	-38°200		
10	+3°796	+44°619			12	+34°391	+4°613	65 1137	9°9	10	-47°205	-24°497			14	-8°456	-12°902		
9	+3°972	+28°735			9	+35°399	+18°033			13	-46°893	-22°198			12	-7°974	-27°222		
10	+4°209	+41°904			9	+35°738	+54°508	64 1068	9°9	11	-46°666	-49°844	66 1021	9°5	11	-6°710	-17°533		
9	+4°296	+14°658			10	+35°765	+41°174			18	-46°642	-46°865	66 1022	8°8	9	-5°104	-22°766		
12	+4°669	+0°248																	
					9	+36°398	+54°408	64 1069	9°9	10	-46°023	-47°042			9	-3°584	-34°895		
11	+5°546	+13°200			12	+37°035	+15°251	65 1138	9°9	10	-45°715	-10°367			40	-3°296	-13°686	66 1031	8°2
9	+5°879	+57°283			14	+37°722	+62°466	64 1071	9°4	11	-45°508	-5°454			10	-3°084	-50°014		
14	+6°405	+18°134			11	+37°939	+14°209			9	-45°165	-45°756			10	-2°960	-2°734		
11	+6°882	+19°482			11	+38°387	+32°559			9	-44°896	-22°848			10	-2°726	-25°327		
9	+8°138	+29°370																	

C.P.D.					C.P.D.					C.P.D.					C.P.D.							
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.			
PLATE CENTRE.																						
9h 54m, - 66°.																						
Plate 3274. 1910, March 18.																						
PROVISIONAL CONSTANTS.																						
a = - .01165 d = + .00018																						
b = - .00008 e = - .01145																						
c = - .0032 f = - .0578																						
To obtain standard co-ordinates, ξ, η																						
$\xi = x + ax + by + c$																						
$\eta = y + dx + ey + f$																						
10	291,	- 1'946	-10'998		18	351,	+23'431	-10'697	66 1038	9'5	14	411,	+48'304	- 8'734	66 1072	9'6	9	-64'111	+22'111	65 1147	9'6	
9	- 1'914	-53'983			15	+23'880	-27'612	66 1039	9'4	11	+48'497	-11'325	66 1075	9'3	10	-61'354	+56'827					
16	- 1'672	-14'736			15	+24'255	-17'595	66 1040	9'4	16	+48'897	-33'432	66 1073	9'8	9	-61'112	+29'779					
13	- 1'650	-24'026			12	+24'305	-14'343	66 1041	9'7	12	+49'068	- 8'081	65 1148	9'2	10	-60'219	+23'349					
22	- 1'642	- 0'090	65 1119	9'4	74	+24'332	-27'937	66 1042	7'2	19	+49'237	- 2'085			9	-59'433	+ 5'179					
10	- 1'476	-31'727			13	+24'607	-49'407	66 1044	9'6	16	+49'384	-35'330	66 1076	9'4	10	-59'399	+ 9'708					
15	- 1'450	-41'836			9	+24'667	-14'316			9	+49'974	-30'095			15	-59'398	+39'183	65 1150	9'6			
13	- 0'814	-59'926			11	+24'743	-31'119			30	+50'306	- 6'094	65 1149	8'8	10	-59'337	+12'870					
16	- 0'155	- 7'782			14	+25'000	-35'794	66 1043	9'5	9	+51'790	-27'737			9	-57'774	+45'025					
11	+ 0'366	-14'544			11	+25'030	-23'491			11	+52'143	-27'916	66 1077	9'9	9	-57'677	+ 9'829	65 1151	9'9			
10	301	+ 1'040	-34'063		9	361	+25'949	-52'930		11	+52'859	-46'496	66 1078	9'7	9	-57'532	+43'575					
12	+ 1'490	-32'337			12	+25'964	- 5'308	65 1130	9'8	9	+53'016	-48'364			15	-56'211	+19'293	65 1153	9'5			
10	+ 1'675	-63'924			18	+26'590	-42'126	66 1045	9'2	9	+53'300	-34'103			16	-55'908	+35'677	65 1155	9'5			
34	+ 1'791	-14'900	66 1032	8'6	12	+27'667	-47'206	66 1046	9'7	11	+54'273	-18'647	66 1079	9'6	9	-55'504	+ 1'661					
9	+ 1'997	-30'317			9	+28'694	- 3'454			13	+54'620	-63'027	66 1081	9'1	18	-55'249	+16'040	65 1154	9'2			
9	+ 2'192	-40'988			11	+29'379	- 6'064			16	+54'823	- 0'376	65 1152	9'3	9	-54'869	+52'018					
12	+ 3'134	-17'273			11	+29'728	- 5'088			13	+55'591	-47'030	66 1083	9'3	9	-54'297	+ 7'892					
12	+ 3'230	-43'152			19	+29'991	-21'263	66 1048	9'2	15	+56'249	-27'013	66 1082	9'5	9	-53'498	+ 0'772					
11	+ 3'725	-19'167			15	+30'002	-12'164	66 1047	9'4	13	+56'378	- 8'263	66 1080	9'5	9	-53'403	+26'904					
56	+ 3'743	-24'695	66 1033	7'8	9	+30'661	- 8'962			10	+56'466	-50'403	66 1084	9'6	9	-52'947	+51'153					
30	311	+ 3'764	-13'034	66 1034	8'8	12	371	+30'753	-13'061	10	+56'637	-24'982			15	-52'756	+ 4'912	65 1156	9'5			
10	+ 3'832	-12'735			11	+32'097	-24'527	66 1050	9'8	26	+58'153	-25'290	66 1085	8'9	16	-52'756	+50'263	65 1158	9'5			
9	+ 3'863	-40'905			16	+32'663	-19'833	66 1051	9'2	16	+58'851	-36'750	66 1086	9'2	11	-52'597	+44'562					
10	+ 4'132	-13'646			9	+34'177	- 7'778			9	+59'807	-23'720			14	-52'444	+28'235	65 1157	9'9			
13	+ 4'708	-23'387			11	+34'236	- 0'507			12	+60'669	-31'789	66 1087	9'5	9	-52'313	+57'871					
10	+ 5'765	- 3'549			9	+34'361	-42'691			9	+61'044	-13'896			14	-50'575	+ 8'591	65 1159	9'9			
10	+ 5'794	-11'950			10	+34'397	- 1'738			10	+61'475	-20'531	66 1088	9'9	15	-50'425	+ 5'983	65 1160	9'8			
11	+ 6'217	-19'338			30	+34'588	-34'625	66 1052	8'6	10	+62'014	-36'232	66 1089	9'9	9	-49'532	+20'272					
9	+ 6'357	-26'462			10	+35'349	-50'271	66 1054	9'9	12	+63'154	-20'095	66 1090	9'6	9	-49'129	+ 9'254					
11	+ 6'439	-18'501			23	+36'074	-11'714	66 1053	9'2	11	+63'690	-33'584	66 1091	9'6	9	-48'546	+44'176					
10	321	+ 6'673	-15'476		14	381	+36'211	-30'617	66 1055	9'6	9	+63'963	- 5'900			11	-47'900	+33'872				
11	+ 7'081	-62'780			11	+36'399	-34'140	66 1056	9'9	11	+63'969	-35'299	66 1093	9'6	9	-47'215	+ 4'549					
15	+ 7'288	-27'321			11	+36'877	- 1'342			9	+64'616	-19'600	66 1092	9'9	16	-46'580	+51'624					
11	+ 7'501	-11'240			12	+37'767	-62'392	66 1057	9'4	9	+64'892	-25'999			9	-46'476	+47'576					
15	+ 8'387	-26'915			9	+38'874	- 3'738			9	+64'892	-25'999			9	-46'151	+11'880					
11	+ 8'435	- 9'585			11	+39'568	-56'044	66 1058	9'6						9	-45'691	+52'759					
13	+ 9'502	-42'838			10	+39'831	-10'530								9	-45'595	+23'476					
9	+10'093	-59'197			11	+39'990	- 4'980								10	-45'185	+14'061					
11	+11'845	-36'389			11	+40'254	- 0'019								10	-44'359	+36'751					
11	+12'681	- 5'920			12	+40'367	-52'483								10	-44'228	+53'230					
9	331	+13'001	-23'741		12	391	+40'523	-52'441	66 1059	9'2					10	-43'523	+59'451					
11	+13'032	-27'563			16	+40'706	- 1'161	65 1142	9'4						10	-43'455	+14'974					
10	+13'537	-46'306			11	+40'863	-35'812								20	-43'106	+18'912	65 1164	9'2			
14	+13'744	- 2'912			11	+41'376	-22'376								9	-42'781	+61'230					
9	+13'909	-22'505			15	+41'675	-25'011	66 1060	9'4						12	-42'586	+19'760	65 1165	9'9			
9	+13'948	-56'625			11	+42'417	-61'952	66 1065	9'6						14	-41'568	+21'777					
16	+14'415	-21'435			51	42'509	-21'679	66 1061	8'0													
15	+15'251	-12'124			16	+42'653	-23'499	66 1063	9'3													
11	+16'101	- 4'494			15	+42'960	-12'837	66 1064	9'4													
9	+16'710	- 8'933			9	+43'229	-57'877															
12	341	+16'898	- 5'102		9	401	+43'482	-10'944														
20	+17'488	-48'890	66 1035	9'2	11	+43'524	-28'931															
10	+17'614	- 3'978			11	+43'560	-15'781															
34	+17'829	- 6'712	65 1125	8'6	11	+44'170	-49'606	66 1068	9'9													
11	+19'580	-14'750			14	+44'313	-41'382	66 1067	9'4													
31	+19'935	-17'073	66 1036	8'6	11	+44'782	-14'309	66 1066	9'9													
13	+20'857	-48'536			9	+45'399	-26'725															
18	+21'223	-41'530	66 1037	9'4	9	+45'900	- 3'808															
15	+21'980	- 3'020	65 1128	9'6	11	+46'086	-15'738	66 1071	9'9													
15	+23'149	-18'645			13	+48'038	-44'906	66 1074	9'6													

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
	51,					111,					171,					231,					
9	-40.824	+13.242			12	-23.260	+58.561			9	-7.497	+51.561			10	+11.306	+37.024				
9	-40.196	+42.543			15	-23.254	+3.224	65	1181	9.6	9	-7.487	+4.578		18	+11.347	+60.063	64	1138	9.5	
9	-40.152	+57.305			12	-23.093	+17.329			9	-7.101	+56.549			9	+11.474	+6.664				
10	-40.024	+2.521			9	-22.968	+53.701			9	-6.949	+50.322			15	+11.643	+12.187	65	1204	9.6	
9	-39.252	+18.142			9	-22.732	+14.883			9	-6.489	+0.659			9	+12.300	+9.424				
18	-39.186	+37.489	65	1168	9.5	9	-22.686	+17.442		9	-6.377	+55.013			9	+12.525	+7.199				
19	-39.172	+22.733	65	1167	9.5	9	-21.836	+12.685		9	-6.108	+6.235			30	+12.643	+63.723	64	1140	8.8	
19	-38.520	+41.362	65	1170	9.4	11	-21.777	+40.518		9	-5.657	+50.801			9	+12.648	+27.415				
9	-38.428	+63.310			11	-21.014	+51.337			11	-5.175	+35.999			19	+12.717	+23.185	65	1205	9.5	
36	-38.255	+21.163	65	1169	8.6	15	-20.972	+26.620	65	1182	9.6	9	-5.151	+1.632	19	+13.058	+37.682	65	1206	9.4	
	61					121					181					241					
9	-37.662	+44.676			9	-20.410	+12.689			9	-5.128	+36.685			9	+13.396	+32.652				
10	-37.435	+8.026			9	-19.739	+27.850			12	-4.164	+24.139			10	+14.170	+27.021				
10	-37.353	+46.978			9	-19.318	+51.207			10	-4.023	+58.389			15	+14.344	+40.827	65	1207	9.9	
9	-37.329	+27.747			12	-19.301	+39.736			12	-3.960	+21.184			9	+14.558	+35.429				
9	-36.983	+6.693			18	-19.227	+39.743	65	1183	9.3	10	-3.827	+62.154		11	+14.610	+31.358				
9	-36.733	+21.395			10	-18.143	+15.649			9	-3.775	+53.391			14	+14.613	+42.490	65	1208	9.9	
9	-36.668	+2.574			11	-17.944	+54.254			9	-3.684	+32.605			14	+15.062	+22.066	65	1209	9.9	
40	-36.602	+61.720	64	1107	8.1	12	-17.899	+21.426		9	-3.291	+28.169			9	+15.199	+31.601				
9	-36.446	+1.644			10	-17.777	+60.824			15	-2.853	+21.471	65	1188	9.9	9	+15.276	+28.778			
12	-36.236	+11.836			15	-17.674	+15.080	65	1185	9.9	18	-2.204	+8.786	65	1189	9.4	13	+15.412	+5.207		
	71					131					191					251					
9	-36.156	+37.636			9	-17.407	+9.254			9	-2.151	+43.256			42	+15.587	+30.095	65	1210	7.9	
9	-36.098	+32.991			11	-17.256	+53.483			18	-1.927	+30.060	65	1190	9.4	12	+16.097	+26.741			
9	-35.751	+28.186			10	-17.054	+63.322			9	-1.761	+39.245			10	+16.138	+48.773				
9	-35.744	+7.331			11	-16.790	+56.894			9	-1.474	+16.685			17	+16.520	+48.982	65	1211	9.5	
10	-35.313	+25.897			9	-16.653	+35.299			9	-1.439	+9.507			11	+16.674	+24.860				
9	-34.755	+23.089			9	-16.324	+64.978			9	-0.886	+20.417			12	+16.695	+38.806				
18	-34.386	+33.539	65	1171	9.5	9	-15.806	+44.532		10	-0.850	+20.190			9	+16.758	+59.216				
9	-34.346	+38.068			10	-15.737	+62.027			9	-0.758	+41.048			16	+16.960	+45.927	65	1212	9.6	
12	-34.161	+38.443			10	-15.647	+38.529			9	-0.500	+19.281			10	+17.537	+52.278				
16	-33.904	+57.335	64	1109	9.6	9	-15.126	+17.590		9	-0.242	+54.505			9	+17.618	+2.855				
	81					141					201					261					
18	-33.596	+31.327	65	1172	9.4	9	-15.124	+48.206		9	+0.126	+58.823			10	+17.766	+62.197				
10	-32.954	+22.811			9	-15.032	+33.671			15	+0.356	+12.093	65	1191	9.6	10	+17.850	+43.495			
9	-32.920	+33.461			9	-14.828	+28.338			12	+0.861	+18.405			26	+18.143	+8.023	65	1213	8.8	
9	-32.725	+37.786			9	-14.733	+48.371			10	+0.921	+44.790			9	+18.637	+2.149				
10	-32.601	+7.982			9	-14.648	+13.102			12	+1.292	+31.045	65	1193	9.9	9	+19.082	+24.030			
9	-31.721	+6.173			10	-14.148	+26.058			13	+1.318	+19.753	65	1192	9.9	11	+19.555	+33.585			
9	-31.484	+4.181			10	-14.058	+28.944			9	+2.525	+61.472			24	+20.182	+27.574	65	1214	8.9	
9	-31.017	+50.311			9	-13.874	+38.771			11	+2.579	+59.345			11	+20.522	+25.069				
9	-30.897	+26.234			9	-13.791	+0.456			10	+2.893	+46.420			12	+21.062	+17.924				
14	-30.783	+50.999	65	1173	9.9	10	-13.534	+11.090		10	+3.557	+22.579			30	+21.593	+12.308	65	1215	8.6	
	91					151					211					271					
9	-29.950	+44.424			9	-13.255	+24.222			16	+5.171	+16.209	65	1194	9.4	10	+21.859	+3.806			
14	-29.844	+21.072	65	1174	9.9	15	-13.241	+7.370	65	1186	9.9	10	+5.199	+35.512		9	+22.049	+1.114			
10	-28.556	+25.080			9	-12.194	+40.380			9	+5.357	+5.076			16	+22.290	+11.430	65	1216	9.5	
13	-28.402	+49.726			9	-11.737	+53.270			16	+6.458	+50.120	65	1196	9.5	9	+22.641	+21.501			
15	-28.274	+26.494	65	1175	9.9	9	-11.587	+63.422		10	+6.752	+49.876			14	+22.966	+21.741				
16	-28.053	+19.077	65	1176	9.6	9	-11.424	+51.733		15	+6.955	+28.941	65	1197	9.9	20	+23.069	+9.544	65	1217	9.2
10	-27.852	+37.131			9	-10.793	+17.056			12	+7.185	+42.135			9	+23.143	+23.315				
9	-27.850	+46.056			10	-10.121	+57.558			19	+7.200	+42.974	65	1198	9.4	20	+23.175	+2.958	65	1218	9.2
10	-27.458	+56.058			9	-9.881	+47.870			9	+7.369	+40.193			9	+23.329	+9.242				
10	-27.338	+54.001			13	-9.719	+4.694			9	+7.472	+25.289			9	+23.536	+20.677				
	101					161					221					281					
9	-27.304	+60.158			9	-9.586	+6.296			9	+8.350	+22.725			9	+23.573	+53.859				
9	-27.040	+29.004			9	-9.400	+13.372			10	+8.726	+32.670			12	+24.001	+6.020				
16	-26.906	+20.692	65	1177	9.6	9	-8.988	+8.155		9	+8.857	+62.575			10	+24.180	+41.082				
9	-26.717	+56.575			9	-8.868	+17.353			10	+8.975	+35.181			12	+24.271	+5.271				
15	-25.826	+47.534	65	1179	9.6	16	-8.707	+62.655	64	1123	9.6	12	+9.471	+34.426	9	+25.129	+35.740				
9	-25.722	+47.994			18	-8.475	+40.195	65	1187	9.5	17	+9.652	+54.442	64	1135	9.5	10	+25.616	+48.736		
9	-25.566	+23.316			9	-8.213	+2.759			15	+9.744	+10.937	65	1200	9.6	9	+26.378	+11.152			
9	-24.675	+19.088			10	-8.001	+61.436			26	+10.103	+33.684	65	1201	8.7	9	+26.652	+54.006			
12	-23.345	+44.138			9	-8.000	+1.256			17	+10.825	+52.148	65	1202	9.5	16	+26.996	+27.814	65	1219	9.5
9	-23.263	+11.588			9	-7.552	+14.866			16	+11.070	+36.074	65	1203	9.8	9	+27.118	+9.223			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
9	+28.088	+ 5.225			9	+52.790	+40.802			18	-54.069	- 8.050	66 1080	9.5	18	-37.347	-10.459	66 1099	9.5
9	+28.174	+ 6.775			10	+53.025	+34.012			9	-54.022	-32.460			11	-37.091	- 9.538		
9	+29.815	+21.951			12	+53.371	+ 9.015			9	-53.856	-51.284			11	-37.026	- 2.024		
9	+29.957	+21.023			10	+53.673	+34.726			17	-52.831	-26.762	66 1082	9.5	11	-36.926	-34.207		
11	+30.193	+10.420			15	+54.215	+ 0.325			9	-52.741	-13.482			9	-36.742	- 2.004		
16	+30.397	+37.431	65 1220	9.9	9	+54.371	+30.560			11	-52.605	-24.705			10	-36.681	-41.011		
11	+30.786	+ 7.265			32	+54.585	+19.376	65 1237	8.6	9	-52.093	-44.212			10	-36.502	- 6.760		
18	+30.994	+57.796	64 1154	9.4	14	+54.749	+60.735	64 1178	9.6	19	-52.060	-46.795	66 1083	9.3	9	-36.158	- 2.603		
9	+31.245	+50.032			13	+54.983	+23.702	65 1239	9.9	9	-52.043	-32.132			9	-35.624	-50.176		
11	+31.461	+30.650			14	+55.442	+31.020	65 1240	9.9	23	-51.850	-62.823	66 1081	9.1	9	-34.798	- 0.416		
	301					361					421					481			
18	+31.717	+28.177	65 1221	9.6	9	+55.466	+ 6.338			23	-51.055	-24.917	66 1085	8.9	9	-34.734	- 3.306		
15	+32.528	+59.567	64 1155	9.6	9	+55.477	+41.302			13	-50.936	-50.079	66 1084	9.6	28	-34.711	-41.079	66 1101	8.5
19	+33.159	+47.807	65 1222	9.3	17	+55.527	+41.775	65 1238	9.2	9	-50.447	-28.036			10	-34.334	-23.278		
24	+33.177	+39.681	65 1223	9.0	13	+55.633	+14.401			11	-49.554	-23.239			18	-34.220	-47.533	66 1102	9.3
9	+33.452	+ 9.729			11	+55.688	+29.644			21	-49.536	-36.306	66 1086	9.2	14	-34.197	-14.870	66 1104	9.9
12	+33.501	+14.004			9	+56.483	+43.031			9	-49.196	-55.138			18	-33.735	-43.209	66 1103	9.3
10	+33.651	+29.163			12	+57.067	+ 2.313			9	-49.106	-16.008			9	-33.654	-39.323		
9	+34.164	+ 9.851			12	+58.328	+22.159			11	-49.007	-13.338			10	-33.443	-15.421		
9	+34.598	+61.897			9	+58.726	+15.126			12	-48.113	-19.926	66 1088	9.9	11	-33.229	-47.802		
14	+34.882	+26.346			19	+58.942	+28.073	65 1241	9.4	18	-48.076	-31.225	66 1087	9.5	18	-32.600	-53.263	66 1105	9.4
	311					371					431					491			
9	+35.124	+48.093			11	+59.011	+38.379			11	-47.850	-17.404			10	-32.569	-56.101		
13	+35.242	+40.633			13	+59.069	+13.887			9	-47.061	-11.531			10	-32.502	- 1.218		
48	+35.351	+33.972	65 1224	7.6	9	+62.035	+62.884			10	-46.716	- 5.149			11	-32.428	-39.303		
9	+35.522	+ 3.294			16	+62.554	+10.018	65 1243	9.4	10	-46.641	- 1.669			11	-32.164	-59.029	66 1106	9.9
9	+35.851	+21.869			9	+63.799	+53.920			16	-46.474	-19.370	66 1090	9.6	10	-31.927	-15.666		
9	+36.281	+ 1.531			20	+64.033	+ 9.631	65 1244	8.9	14	-46.438	-35.554	66 1089	9.9	10	-31.788	-49.618		
15	+36.682	+43.799	65 1225	9.9	9	+64.180	+16.730			13	-45.058	-18.769	66 1092	9.9	9	-31.759	-20.823		
11	+37.119	+32.453			10	+64.823	+26.783			16	-44.924	-32.787	66 1091	9.6	17	-31.628	-23.525	66 1107	9.5
10	+37.362	+60.631			9	+64.857	- 4.392			9	-44.807	- 7.777			9	-31.262	- 9.358		
11	+38.300	+18.576			11	+64.078	-62.640	66 1065	9.6	17	-44.564	-34.492	66 1093	9.6	23	-30.500	-58.955	66 1108	9.0
	321					381					441					501			
15	+39.166	+23.175			13	+63.795	-16.270	66 1071	9.9	10	-44.549	-11.554			11	-30.413	-19.137		
15	+39.394	+35.446	65 1227	9.5	14	+63.693	-41.988	66 1067	9.4	9	-44.466	-48.309			9	-30.140	-35.659		
12	+39.860	+21.766			9	+63.667	-27.259			9	-44.366	-11.560			9	-29.594	-41.183		
9	+40.462	+62.133			9	+63.542	-58.486			14	-44.316	-25.142			14	-28.995	-38.821	66 1109	9.9
10	+40.558	+ 4.167			10	+63.235	-50.191	66 1068	9.9	10	-43.863	-36.334			9	-28.646	- 0.314		
9	+40.568	+56.714			17	+62.096	- 9.139	66 1072	9.6	11	-43.613	-21.580			9	-28.609	-56.920		
16	+40.754	+24.285	65 1229	9.9	9	+61.854	-38.562			15	-42.964	-10.572	66 1094	9.9	11	-28.505	-39.559		
22	+40.866	+47.662	65 1228	9.2	14	+61.684	-11.704			10	-42.572	-27.946			13	-28.315	- 0.552		
9	+40.990	+43.760			22	+61.649	- 2.432	65 1148	9.2	14	-41.972	- 0.300	65 1166	9.9	9	-27.726	- 4.242		
9	+41.450	+12.804			14	+61.392	- 8.433	66 1073	9.8	10	-41.940	-49.126			30	-27.412	-19.809	66 1110	8.4
	331					391					451					511			
14	+41.580	+49.636			26	+60.278	- 6.341	65 1149	8.8	11	-41.805	-36.104			9	-26.554	-39.792		
11	+42.015	+62.217			15	+59.690	-45.225	66 1074	9.6	9	-41.532	-16.499			12	-26.208	-18.715		
9	+42.544	+41.391			19	+59.678	-33.729	66 1075	9.3	11	-40.961	-14.469			10	-26.071	-38.201		
14	+42.939	+ 4.505	65 1231	9.9	20	+59.056	-35.586	66 1076	9.4	10	-40.743	-44.013			9	-26.066	-17.272		
9	+43.025	+26.773			10	+58.871	-30.317			9	-40.710	-31.764			17	-25.211	- 6.330	65 1178	9.6
9	+43.068	+56.339			9	+58.260	-53.136			11	-40.634	-51.129			9	-24.858	-31.702		
10	+44.109	+26.495			11	+57.240	-27.812			11	-40.440	-31.911			17	-24.627	- 0.789	65 1180	9.6
11	+44.137	+22.428			13	+56.879	-27.962	66 1077	9.9	9	-40.190	-37.811			26	-24.565	-40.010	66 1111	8.5
9	+44.876	+12.471			18	+56.204	- 0.322	65 1152	9.3	28	-39.763	-62.849	66 1095	8.9	10	-24.165	-63.078		
15	+45.208	+ 8.881	65 1232	9.6	9	+55.877	- 3.542			12	-39.627	-25.931			11	-23.992	-24.802		
	341					401					461					521			
11	+45.905	+38.640			9	+55.856	-30.939			9	-39.284	-48.051			10	-23.982	-12.582		
9	+46.225	+34.528			12	+55.598	-25.112			9	-39.120	-30.935			18	-23.488	-12.605	66 1112	9.4
9	+46.303	+ 7.423			15	+55.421	-18.590	66 1079	9.6	16	-39.085	-10.308	66 1096	9.6	9	-23.466	-29.917		
9	+46.637	+20.714			10	+55.234	-34.053			9	-38.910	-35.834			11	-23.126	- 2.971		
18	+47.561	+36.932	65 1233	9.3	9	+54.935	-16.446			13	-38.418	-24.993			12	-21.977	-39.937		
9	+48.131	+59.365			14	+54.795	-46.454	66 1078	9.7	10	-38.043	- 1.794			9	-21.613	-22.211		
9	+49.645	+11.626			10	+54.511	-48.284			9	-37.995	-60.177			11	-20.742	-19.425		
12	+51.281	+28.283			9	+54.471	- 0.815			13	-37.710	- 4.276			13	-20.154	-64.252	66 1113	9.7
15	+51.521	+23.833	65 1235	9.9	9	+54.422	-62.165			9	-37.471	-27.387			9	-20.140	-10.109		
9	+52.530	+21.479			9	+54.173	-28.135			28	-37.450	-16.974	66 1098	8.5	15	-19.691	-60.116	66 1114	9.7

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531,					591,					651,					711,			
9	-19°49I	-30°888			15	-0°994	-39°448	66 1130	9·8	9	+15°424	-28°702			17	+35°692	-26°342	66 1158	9·4
9	-19°253	-6°030			9	-0°913	-49°444			17	+15°447	-11°958	66 1142	9·8	9	+36°465	-33°590		
9	-19°090	-15°845			11	-0°895	-57°205			16	+15°604	-32°157	66 1143	9·8	20	+36°492	-2°137	65 1226	9·2
12	-18°856	-2°512			11	-0°659	-25°985			10	+15°918	-21°621			9	+36°934	-35°542		
11	-18°694	-15°612			14	-0°253	-27°170			10	+16°088	-37°868			11	+37°041	-57°636	66 1161	9·9
14	-18°377	-30°288	66 1115	9·9	9	+1°036	-32°160			20	+16°177	-55°832	66 1144	9·1	16	+37°262	-8°861	66 1160	9·8
15	-18°288	-4°491	65 1184	9·9	11	+1°078	-30°889			13	+17°064	-48°767			19	+37°810	-32°876	66 1162	9·2
17	-18°192	-18°247	66 1117	9·5	11	+1°296	-43°740			9	+17°146	-61°597			9	+38°336	-58°167		
18	-18°062	-28°303	66 1116	9·4	9	+1°447	-51°969			12	+17°711	-53°661			9	+38°438	-2°154		
9	-18°012	-19°449			16	+1°616	-38°340	66 1132	9·7	16	+17°729	-16°094	66 1145	9·6	11	+38°729	-9°885		
	541					601					661					721			
17	-17°015	-42°720	66 1118	9·5	10	+1°900	-11°499			12	+17°865	-52°297			11	+38°829	-22°805		
10	-16°671	-27°337			9	+2°057	-24°929			9	+18°142	-25°986			15	+39°019	-31°265	66 1163	9·9
10	-16°026	-7°762			11	+2°411	-16°321			10	+18°775	-24°490			15	+39°388	-47°904	66 1164	9·6
9	-15°699	-4°509			10	+2°424	-19°313			11	+18°871	-35°976			9	+39°414	-38°111		
11	-15°120	-7°383			9	+2°931	-63°160			17	+19°174	-51°595	66 1146	9·6	9	+39°909	-21°009		
9	-15°112	-51°568			9	+2°992	-49°620			10	+19°318	-30°149			11	+40°322	-43°034		
16	-14°891	-46°500	66 1119	9·7	11	+3°472	-16°279			9	+19°399	-57°501			18	+40°322	-5°401	65 1230	9·5
9	-14°821	-54°186			9	+3°780	-19°792			16	+19°666	-42°971	66 1147	9·9	9	+40°437	-39°603		
26	-14°795	-51°486	66 1120	8·5	17	+3°810	-30°463	66 1134	9·5	9	+19°817	-58°263			10	+40°876	-5°569		
15	-14°310	-12°333	66 1121	9·9	12	+4°208	-55°349			9	+19°921	-26°227			16	+40°939	-12°294	66 1165	9·8
	551					611					671					731			
9	-14°070	-14°404			10	+4°424	-15°391			10	+22°476	-33°970			10	+41°262	-4°167		
9	-13°781	-53°616			9	+4°623	-42°668			16	+23°451	-36°251	66 1148	9·9	9	+41°544	-36°937		
12	-13°274	-11°148			11	+4°773	-16°978			13	+23°703	-3°208			15	+42°255	-10°198	66 1166	9·9
11	-13°157	-9°987			9	+5°246	-41°952			9	+24°371	-55°606			10	+42°402	-28°151		
10	-13°051	-52°217			16	+5°609	-28°302	66 1135	9·8	17	+24°464	-25°336	66 1150	9·4	10	+42°470	-56°190		
10	-12°984	-40°386			18	+5°809	-2°692	65 1195	9·6	16	+24°550	-18°019	66 1149	9·9	11	+42°983	-42°464		
15	-12°696	-22°344			10	+6°173	-28°176			9	+24°714	-11°556			9	+43°309	-53°379		
11	-12°199	-18°030			9	+6°462	-0°632			16	+25°294	-30°135	66 1151	9·9	10	+43°448	-14°848		
10	-11°963	-34°177			10	+6°648	-43°172			9	+25°538	-18°030			9	+43°570	-43°876		
10	-11°317	-58°936			10	+6°667	-26°400			12	+25°550	-10°923			9	+44°300	-8°243		
	561					621					681					741			
9	-10°574	-33°205			11	+7°202	-16°973			11	+26°222	-57°422			9	+44°793	-32°708		
24	-10°273	-42°874	66 1122	9·0	12	+7°752	-54°551	66 1136	9·9	10	+26°366	-46°921			11	+45°075	-4°946		
9	-10°133	-53°922			9	+8°158	-35°093			9	+26°438	-7°457			9	+45°221	-26°019		
9	-9°865	-33°799			10	+8°208	-22°262			9	+26°574	-52°295			10	+45°246	-15°472		
10	-9°785	-50°985			12	+8°368	-0°204			22	+26°834	-14°448	66 1152	9·0	18	+46°114	-19°697	66 1167	9·4
16	-9°740	-22°417	66 1123	9·9	9	+8°467	-33°979			9	+26°931	-8°617			9	+46°618	-16°842		
10	-9°584	-5°706			10	+8°476	-40°643			14	+27°125	-60°602	66 1153	9·6	9	+46°667	-64°590		
9	-7°666	-34°163			14	+9°193	-8°163	66 1137	9·9	9	+27°515	-15°239			24	+46°847	-5°676	65 1234	9·0
10	-6°239	-36°404			20	+9°215	-5°092	65 1199	9·2	11	+28°044	-23°670			11	+48°964	-41°383		
17	-6°173	-39°991	66 1124	9·4	18	+9°825	-36°525	66 1138	9·3	9	+28°300	-59°918			15	+49°504	-31°016	66 1168	9·6
	571					631					691					751			
14	-6°075	-44°890	66 1125	9·8	12	+10°142	-35°633			9	+29°102	-12°948			12	+49°530	-31°364	66 1169	9·9
11	-5°564	-60°070			11	+10°147	-2°168			10	+29°187	-43°861			10	+49°748	-19°689		
15	-5°477	-24°473	66 1126	9·9	15	+10°359	-22°126			10	+30°072	-16°448			10	+49°784	-22°141		
10	-5°183	-36°556			10	+10°461	-27°386			11	+30°165	-59°710			11	+50°900	-2°521		
9	-4°663	-31°428			14	+10°604	-18°880			11	+30°648	-28°020			10	+51°397	-2°034		
14	-3°899	-14°078	66 1127	9·9	9	+10°714	-37°237			9	+30°750	-5°149			32	+51°462	-47°697	66 1172	8·5
9	-3°774	-22°351			36	+10°794	-32°435	66 1139	8·0	18	+30°784	-38°639	66 1154	9·2	14	+51°828	-28°028	66 1170	9·8
18	-3°670	-60°916	66 1128	9·4	12	+11°392	-39°541	66 1140	9·9	12	+30°831	-10°846			20	+52°383	-4°651	65 1236	9·3
9	-3°591	-29°284			11	+11°565	-23°416			9	+31°219	-49°435			9	+52°408	-19°201		
9	-3°522	-20°701			10	+12°016	-10°540			21	+31°512	-26°737	66 1155	9·2	9	+52°608	-43°690		
	581					641					701					761			
14	-3°376	-22°888			9	+12°160	-24°135			10	+32°768	-35°585			21	+52°626	-14°889	66 1171	9·0
10	-2°713	-15°425			10	+12°614	-18°885			9	+32°982	-56°041			18	+53°067	-10°887	66 1173	9·5
18	-2°371	-53°424	66 1129	9·3	9	+13°254	-39°879			13	+34°291	-27°025			12	+53°661	-29°276		
9	-2°311	-28°562			9	+13°772	-36°428			11	+34°386	-56°697			9	+53°791	-13°620		
11	-2°277	-51°004			10	+14°039	-8°235			9	+34°549	-12°228			18	+54°111	-9°281	66 1174	9·5
10	-2°182	-45°118			10	+14°584	-50°411			10	+34°677	-43°964			9	+54°155	-23°320		
9	-2°008	-0°878			17	+14°772	-25°994	66 1141	9·8	15	+34°726	-38°723	66 1157	9·9	9	+54°356	-13°012		
11	-1°497	-46°420			9	+14°987	-46°345			25	+35°048	-60°418	66 1159	8·9	12	+54°417	-25°773		
10	-1°331	-38°687			10	+15°064	-28°622			15	+35°117	-7°825	66 1156	9·9	36	+56°230	-63°927	66 1176	8·5
10	-1°330	-2°242			9	+15°385	-42°418			9	+35°125	-33°491			9	+56°963	-25°950		

C.P.D.				C.P.D.				C.P.D.				C.P.D.							
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.			
	771,				PLATE CENTRE. 10h 12m, - 66°. Plate 3256. 1910, March 11. PROVISIONAL CONSTANTS. a = - .01152 d = + .00016 b = - .00009 e = - .01146 c = - .0357 f = + .0398 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$														
9	+57.413	-34.737	65 1242	9.7	9	-63.952	+18.093	65 1235	9.9	15	-48.151	+17.205	65 1244	8.9	10	-35.219	+7.765	65 1253	9.9
9	+58.326	-17.399			9	-62.600	+7.320			35	-47.806	+10.119			11	-35.210	+11.045		
10	+58.784	-40.535			9	-62.290	+11.078			11	-46.702	+43.080			11	-34.981	+29.180		
17	+60.112	-4.988			15	-61.845	+27.811			10	-46.608	+19.987			16	-34.843	+19.709		
9	+60.322	-38.217			16	-61.293	+23.393			13	-46.399	+25.128			22	-34.665	+9.267		
11	+60.806	-4.678	66 1178	9.9						11	-45.986	+0.011			12	-34.662	+9.803	65 1255	9.8
10	+60.898	-2.376								11	-45.927	+16.887	15	-34.453	+2.354				
9	+61.211	-61.747								11	-45.926	+40.008	12	-34.305	+63.564				
10	+61.316	-9.474								16	-45.638	+22.054	12	-34.074	+37.708				
10	+61.500	-39.217								9	-45.577	+12.755	18	-33.056	+12.766				
	781		66 1177	9.9							61				121				
14	+61.504	-20.110	66 1179	9.5	9	-63.952	+18.093			14	-45.443	+11.040			12	-33.027	+7.508	64 1199	9.4
11	+62.503	-54.982			9	-62.600	+7.320			10	-44.872	+47.583			11	-32.853	+24.414		
11	+62.819	-1.505			9	-62.290	+11.078			11	-44.490	+41.094			11	-32.841	+62.306		
9	+63.423	-33.099			15	-61.845	+27.811			14	-44.362	+7.207			12	-32.677	+49.312		
10	+63.942	-3.906			16	-61.293	+23.393			12	-44.311	+12.310			15	-32.644	+2.804		
10	+64.035	-10.543	66 1180	9.5	12	-61.235	+40.387			9	-44.179	+11.877			9	-32.132	+55.293	65 1257	9.9
15	+64.614	-40.655			9	-61.181	+47.326			10	-44.061	+33.031	10	-32.124	+6.583				
					20	-60.732	+60.418	64 1178	9.6	12	-43.959	+19.658	10	-31.881	+27.328				
					15	-60.530	+33.653			11	-43.942	+52.880	12	-31.843	+1.443				
					10	-60.491	+30.663			9	-43.826	+40.767	28	-31.672	+58.854				
						11					71				131				
					9	-60.426	+22.653			12	-43.655	+24.821			11	-31.647	+55.125	65 1258	9.9
					12	-60.097	+21.103			14	-43.455	+43.724			11	-31.557	+48.602		
					14	-59.958	+34.409			12	-43.111	+25.532			12	-31.498	+3.835		
					11	-58.950	+30.303			10	-43.007	+27.424			12	-31.373	+18.437		
					12	-58.604	+41.088			14	-42.814	+40.343			12	-31.352	+55.053		
					41	-58.598	+41.576	65 1238	9.2	10	-42.789	+27.290			10	-31.335	+47.166	65 1260	9.6
					9	-58.572	+30.932			14	-42.274	+33.475			11	-31.265	+26.110		
					16	-58.395	+8.751			12	-42.054	+18.409			9	-31.042	+14.222		
					51	-57.927	+19.170	65 1237	8.6	23	-41.991	+10.418	65 1247	9.6	10	-30.685	+5.453		
					24	-57.902	+30.830	65 1240	9.9	10	-41.364	+22.925			14	-30.470	+58.525		
						21					81				141				
					25	-57.832	+23.515	65 1239	9.9	9	-41.276	+3.067			16	-29.916	+4.145	65 1261	8.5
					13	-57.729	+42.896			9	-41.076	+24.845			14	-29.909	+31.931		
					15	-57.566	+29.480			10	-40.859	+30.803			12	-29.743	+16.227		
					26	-56.920	+0.130			9	-40.764	+2.995			10	-29.719	+29.614		
					15	-56.510	+14.280			9	-40.579	+18.789			11	-29.667	+34.191		
					11	-56.112	+6.215			9	-40.481	+21.262			9	-29.629	+35.654	65 1261	8.5
					12	-55.322	+39.577			9	-40.332	+0.620			16	-29.323	+8.573		
					15	-54.886	+38.441			9	-40.281	+23.081			11	-29.171	+46.404		
					11	-54.569	+54.599			11	-39.922	+49.010			24	-28.642	+21.848		
					16	-54.396	+22.209			11	-39.551	+52.716			14	-28.638	+48.036		
						31					91				151				
					16	-54.226	+2.320			77	-39.309	+58.941	64 1190	7.4	14	-28.296	+26.838	65 1261	8.5
					33	-54.217	+28.157	65 1241	9.4	12	-39.294	+5.409			12	-28.212	+64.496		
					12	-53.671	+47.662			10	-38.918	+10.956			11	-28.075	+38.273		
					13	-53.645	+63.080			10	-38.843	+9.612			10	-27.761	+27.796		
					12	-53.633	+33.547			11	-38.806	+45.402			12	-27.715	+11.700		
					12	-53.506	+15.204			10	-38.763	+54.044			14	-27.693	+19.928	65 1261	8.5
					15	-53.063	+14.014			10	-38.604	+3.660			9	-27.544	+41.974		
					11	-52.017	+32.188			74	-38.480	+40.407	65 1248	7.2	14	-27.209	+5.093		
					9	-51.653	+59.777			9	-38.293	+50.511			13	-27.153	+16.517		
					12	-51.637	+50.471			11	-38.143	+59.299			10	-26.739	+40.943		
						41					101				161				
					10	-51.545	+34.816			9	-37.935	+50.187			11	-26.597	+39.445	65 1261	8.5
					15	-51.235	+54.267			21	-37.615	+39.905	65 1250	9.6	10	-26.423	+40.790		
					9	-50.875	+53.474			12	-37.584	+48.590			11	-26.328	+57.459		
					12	-50.682	+22.410			14	-37.547	+7.093			9	-25.764	+38.033		
					15	-50.265	+61.562			12	-37.332	+6.498			40	-25.750	+29.148		
					9	-49.762	+56.405			14	-37.329	+49.518			12	-25.617	+39.627	65 1261	8.5
					33	-49.313	+10.392	65 1243	9.4	16	-37.149	+3.392	65 1249	9.9	15	-25.529	+20.374		
					11	-49.072	+3.029			13	-36.026	+15.671			10	-25.507	+9.315		
					28	-48.824	+45.900	65 1245	9.8	34	-35.938	+41.588	65 1251	9.0	9	-25.329	+37.549		
					14	-48.268	+27.284			14	-35.351	+21.686			11	-25.182	+51.186		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
11	-25°080	+59°443			12	-15°290	+54°898			22	-5°668	+11°924	65 1278	9°6	13	+4°730	+49°163		
14	-24°558	+29°332			9	-15°246	+1°973			11	-5°637	+55°375			15	+4°894	+52°918	65 1285	9°9
11	-24°494	+9°832			13	-15°047	+33°937			14	-5°388	+31°503			13	+4°898	+63°891		
14	-24°434	+35°643			14	-15°003	+49°844			11	-5°096	+13°200			16	+5°976	+58°247		
9	-24°426	+62°984			12	-14°995	+48°932			14	-4°784	+20°312			10	+6°555	+24°952		
9	-24°396	+9°560			53	-14°854	+12°499	65 1267	8°0	12	-4°657	+33°063			9	+6°814	+58°212		
12	-24°358	+24°177			12	-14°601	+24°167			9	-4°622	+43°248			11	+6°978	+46°264		
13	-24°326	+13°363			12	-14°576	+14°746			37	-4°551	+61°919	64 1222	8°8	9	+7°075	+44°419		
13	-24°186	+20°418			10	-14°561	+15°348			14	-4°537	+46°034			24	+7°196	+58°867	64 1229	9°5
15	-24°111	+18°726			14	-13°931	+50°965			12	-4°231	+64°531			10	+7°217	+18°860		
9	-24°060	+0°534			241					301				361					
23	-23°984	+14°483	65 1262	9°8	10	-13°834	+63°851			13	-4°200	+50°208			15	+7°253	+39°510		
9	-23°880	+7°556			10	-13°820	+63°681			9	-4°123	+6°237			10	+7°352	+32°682		
10	-23°840	+43°128			11	-13°734	+63°452			14	-4°099	+41°684			9	+7°366	+59°161		
14	-23°716	+25°704			12	-13°692	+35°019			9	-4°025	+46°909			15	+7°454	+60°929		
					9	-13°335	+20°950			14	-3°894	+43°104			9	+7°848	+9°831		
14	-23°302	+25°610			23	-13°124	+30°716	65 1269	9°6	16	-3°866	+43°318	65 1279	9°9	14	+8°139	+43°750		
22	-23°156	+59°503	64 1201	9°6	14	-13°018	+39°919			15	-3°863	+54°498			16	+8°229	+58°639	64 1231	9°9
16	-23°032	+59°864	64 1203	9°9	16	-12°605	+2°842			14	-3°790	+54°203			14	+8°406	+51°330		
21	-22°962	+26°617	65 1264	9°6	26	-12°322	+13°358	65 1270	9°4	15	-3°788	+30°073			14	+8°648	+26°655		
15	-22°700	+23°793			16	-12°241	+56°591			14	-3°554	+53°412			15	+8°680	+61°003		
	191				251					311				371					
15	-22°672	+52°392			12	-12°220	+45°208			14	-3°405	+39°093			12	+8°691	+16°088		
15	-22°544	+58°237			12	-12°050	+24°928			10	-2°856	+20°413			12	+8°772	+2°488		
15	-22°297	+54°515			12	-12°034	+11°897			12	-2°672	+16°543			10	+8°936	+22°102		
12	-21°927	+9°045			11	-11°961	+42°274			14	-2°640	+54°579			15	+8°986	+0°124		
10	-21°584	+55°339			9	-11°899	+13°720			14	-2°606	+57°781			11	+9°183	+9°985		
13	-21°119	+5°978			14	-11°566	+34°868			12	-2°438	+47°258			11	+9°188	+11°479		
12	-20°998	+26°663			9	-11°039	+48°732			12	-1°640	+51°979			11	+9°296	+8°978		
9	-20°429	+42°798			11	-10°794	+63°612			29	-1°418	+44°128			11	+9°428	+8°056		
9	-20°212	+51°722			14	-10°688	+53°999			10	-1°083	+10°440	65 1280	9°2	27	+9°521	+33°398	65 1286	9°4
9	-20°208	+60°408			14	-10°399	+50°347			9	-0°541	+8°627			10	+9°848	+28°265		
	201				261					321				381					
12	-20°090	+46°561			13	-10°399	+48°648			9	-0°187	+36°597			38	+9°877	+58°131	64 1234	8°7
10	-19°681	+0°667			14	-10°211	+3°244			14	+0°377	+23°487			16	+10°136	+13°799	65 1287	9°9
11	-19°659	+20°250			13	-9°985	+49°098			30	+0°511	+42°065	65 1281	9°2	9	+10°351	+36°104		
12	-19°484	+43°646			14	-9°978	+9°693			9	+0°678	+59°359			9	+10°556	+35°180		
15	-18°317	+10°579			13	-9°962	+15°517			14	+0°770	+11°372			14	+10°611	+35°997		
12	-18°161	+2°177			12	-9°961	+21°777			14	+0°778	+64°665			16	+10°668	+35°948		
12	-17°631	+31°239			11	-9°816	+19°791			9	+0°845	+17°411			11	+11°146	+52°330		
9	-17°581	+57°476			13	-9°679	+46°114			13	+0°955	+23°093			13	+11°342	+35°720		
12	-17°549	+47°395			15	-9°630	+3°949	65 1271	9°9	15	+1°215	+64°374			40	+11°550	+25°265	65 1288	8°8
13	-17°499	+27°606			12	-9°549	+3°858			9	+1°263	+58°219			22	+11°580	+0°750	65 1289	9°9
	211				271					331				391					
14	-17°316	+34°967			10	-9°444	+37°107			9	+1°399	+33°963			15	+11°738	+12°669		
22	-17°291	+60°020	64 1207	9°9	12	-9°289	+40°639			9	+1°433	+39°631			10	+11°755	+62°501		
13	-17°131	+36°909			10	-8°958	+0°432			9	+1°826	+64°333			9	+11°963	+61°383		
9	-17°082	+48°386			16	-8°603	+52°957	65 1272	9°9	15	+1°984	+58°343			9	+11°971	+59°828		
13	-16°969	+60°186			12	-8°589	+64°616			26	+2°082	+33°769	65 1282	9°6	11	+12°247	+30°612		
12	-16°947	+12°997			22	-8°278	+36°617	65 1274	9°8	11	+2°238	+33°899			14	+12°331	+61°555		
21	-16°856	+51°524	64 1208	9°8	38	-8°271	+61°184	64 1215	9°5	14	+2°375	+42°286			12	+12°555	+42°447		
13	-16°739	+27°836			90	-8°158	+7°388	65 1273	6°2	11	+2°423	+38°811			14	+12°616	+43°559		
12	-16°697	+2°392			10	-8°108	+11°037			12	+2°781	+43°413			14	+12°684	+37°074		
11	-16°595	+64°596			12	-7°852	+22°511			15	+2°945	+8°378			14	+12°971	+50°054		
	221				281					341				401					
10	-16°497	+8°044			18	-7°571	+62°352	64 1217	9°6	10	+3°551	+19°594			9	+13°100	+38°660		
38	-16°480	+18°850	65 1265	8°7	23	-7°268	+3°502	65 1275	9°8	12	+3°561	+49°098			10	+13°126	+25°857		
11	-16°441	+3°149			14	-7°215	+51°359			11	+3°640	+57°712			16	+13°356	+47°815	65 1290	9°9
10	-16°415	+62°771			15	-7°134	+6°025			10	+3°833	+36°674			10	+13°381	+23°888		
11	-16°183	+28°984			16	-7°045	+26°939			12	+4°113	+35°903			14	+13°401	+59°292		
9	-16°131	+27°656			45	-6°993	+47°884	65 1276	7°7	14	+4°142	+33°835			15	+13°412	+11°465		
11	-15°929	+57°742			10	-6°979	+27°635			9	+4°362	+8°193			13	+13°477	+31°756		
16	-15°811	+1°283	65 1266	9°9	42	-6°944	+47°978			10	+4°406	+1°613			15	+13°485	+46°566		
9	-15°704	+25°077			11	-6°848	+27°773			38	+4°478	+28°665	65 1283	8°9	15	+13°552	+54°092		
12	-15°590	+22°222			16	-6°029	+41°840	65 1277	9°9	27	+4°661	+52°313	65 1284	9°4	9	+13°778	+64°406		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411					471					531					591			
15	+14.013	+57.602			12	+25.325	+17.265			10	+34.027	+37.134			9	+42.952	+60.565		
10	+14.141	+18.861			12	+25.474	+26.683			10	+34.184	+35.885			11	+43.020	+53.037		
13	+14.159	+57.658			9	+25.508	+9.805			10	+34.217	+11.814			25	+43.303	+60.788	64 1256	9.9
14	+14.183	+45.647			14	+25.732	+57.238			12	+34.673	+37.965			13	+43.416	+25.813		
15	+14.295	+50.032			12	+25.748	+43.881			10	+34.923	+7.149			12	+43.592	+43.146		
9	+14.633	+5.815			22	+25.764	+4.015	65 1301	9.7	12	+35.004	+15.082			11	+43.601	+58.397		
11	+14.940	+14.345			11	+26.065	+37.500			11	+35.012	+56.143			11	+44.251	+3.620		
13	+14.996	+61.227			10	+26.111	+64.897			10	+35.137	+32.444			12	+44.339	+36.023		
22	+15.297	+19.149	65 1292	9.6	9	+26.137	+42.792			11	+35.155	+56.180			11	+44.458	+11.763		
13	+15.551	+33.762			12	+26.165	+3.924			10	+35.521	+55.496			10	+44.760	+13.321		
	421					481					541					601			
9	+15.886	+23.877			9	+26.172	+29.911			12	+35.654	+10.398			12	+44.988	+12.536		
69	+16.219	+64.887	64 1238	7.5	9	+26.195	+23.731			14	+35.728	+36.901			37	+45.372	+56.677	64 1257	9.0
15	+16.343	+49.612			13	+26.742	+21.589			9	+35.986	+36.684			62	+45.448	+48.740	65 1315	8.2
15	+16.369	+1.233			13	+26.816	+31.568			14	+36.059	+34.899			9	+45.872	+2.325		
9	+16.584	+37.279			12	+27.010	+54.594			9	+36.347	+44.317			9	+45.920	+62.997		
9	+16.761	+0.058			15	+27.361	+23.581			10	+36.434	+13.831			14	+45.935	+12.943		
11	+16.780	+47.946			15	+27.549	+46.904			14	+36.453	+55.141			10	+45.970	+44.235		
11	+16.850	+49.033			12	+27.557	+3.914			10	+36.497	+26.517			9	+45.989	+49.859		
26	+17.179	+7.170	65 1294	9.8	9	+27.610	+6.854			13	+36.698	+51.426			15	+46.083	+8.299		
12	+17.360	+42.131			14	+27.731	+16.457			23	+36.812	+49.740	65 1306	9.7	15	+46.086	+50.483		
	431					491					551					611			
15	+17.367	+24.533			11	+27.748	+34.414			11	+37.146	+22.245			10	+46.160	+13.770		
10	+17.384	+23.461			26	+27.856	+36.802	65 1302	9.3	11	+37.327	+51.566			14	+46.269	+41.608		
11	+17.479	+42.942			9	+27.942	+54.234			10	+37.586	+16.211			15	+46.392	+3.119		
12	+17.490	+40.232			13	+28.077	+4.815			21	+37.650	+49.674	65 1307	9.8	31	+46.791	+59.659	64 1258	9.6
13	+17.703	+32.127			13	+28.292	+39.147			12	+37.753	+15.053			12	+46.846	+51.720	65 1316	9.7
43	+17.770	+19.782	65 1295	8.4	11	+28.370	+14.994			9	+37.852	+44.084			12	+46.848	+4.453		
15	+18.026	+56.628			10	+28.432	+59.550			16	+38.012	+24.211	65 1308	9.9	54	+46.934	+8.740	65 1317	9.3
11	+18.205	+3.809			10	+28.488	+14.872			15	+38.077	+61.926			10	+46.967	+41.093		
11	+18.398	+45.074			9	+28.751	+42.390			15	+38.348	+46.970			15	+47.290	+9.163		
9	+18.433	+45.311			18	+28.959	+35.766	65 1303	9.9	12	+38.477	+26.290			14	+47.463	+16.587		
	441					501					581					621			
13	+18.814	+20.499			11	+29.129	+26.555			15	+38.481	+52.898			10	+47.911	+41.919		
21	+18.932	+50.852	65 1297	9.9	12	+29.217	+13.807			9	+38.516	+46.958			11	+48.171	+41.008		
9	+19.352	+49.610			12	+29.279	+61.376			24	+38.832	+22.293	65 1309	9.5	9	+48.940	+1.345		
9	+19.459	+47.325			12	+29.405	+42.969			12	+38.928	+54.506			13	+48.992	+13.164		
36	+19.496	+24.712	65 1298	8.6	24	+29.617	+34.512	65 1304	9.5	9	+39.527	+40.594			12	+49.011	+36.434		
13	+19.702	+36.718			13	+29.680	+19.196			10	+39.549	+11.668			9	+49.106	+5.809		
14	+19.778	+44.511			12	+29.768	+51.849			13	+39.930	+21.923			28	+49.522	+0.509	65 1319	9.6
21	+20.116	+10.192			11	+29.964	+10.536			10	+39.982	+53.844			14	+49.658	+22.829		
13	+20.377	+46.204			10	+30.020	+63.437			11	+40.338	+12.085			11	+49.678	+33.127		
16	+20.533	+53.076	64 1242	9.9	13	+30.636	+4.744			14	+40.355	+64.905			16	+49.699	+33.078		
	451					511					571					631			
16	+20.924	+34.578	65 1299	9.9	12	+30.758	+23.609			26	+40.545	+23.547	65 1310	9.4	15	+50.184	+50.796	65 1318	9.7
10	+21.234	+29.907			11	+31.175	+48.296			11	+40.632	+14.414			12	+50.463	+6.432		
13	+21.308	+22.515			14	+31.380	+21.840			15	+40.910	+14.822			14	+50.529	+30.379		
13	+21.359	+1.176			15	+31.682	+57.207			14	+41.059	+24.988			16	+50.631	+19.198	65 1320	9.8
9	+21.578	+31.928			10	+31.894	+24.587			9	+41.072	+19.031			14	+50.945	+14.215		
15	+21.650	+57.282			13	+32.056	+22.129			15	+41.131	+54.992			14	+50.968	+11.643		
12	+21.678	+29.271			14	+32.763	+10.336			14	+41.150	+41.174			11	+51.032	+21.713		
15	+22.218	+47.054			11	+32.809	+48.844			10	+41.209	+9.411			15	+51.167	+30.040	65 1321	9.7
12	+22.540	+2.934			15	+32.908	+61.147			15	+41.626	+46.948			13	+51.628	+17.828		
24	+22.585	+24.515	65 1300	9.6	9	+33.015	+43.036			25	+41.721	+51.442	65 1311	9.6	29	+51.938	+5.827	65 1323	9.5
	461					521					581					641			
15	+22.675	+24.936			10	+33.016	+30.794			15	+41.752	+3.783			13	+52.229	+27.198		
12	+22.709	+30.948			11	+33.174	+36.716			46	+41.755	+23.172	65 1313	8.4	11	+52.614	+50.304		
10	+23.220	+4.655			10	+33.196	+33.817			9	+41.777	+43.308			15	+52.783	+49.063	65 1322	9.7
12	+23.327	+1.643			10	+33.225	+16.359			10	+41.839	+31.315			15	+53.844	+38.036	65 1325	9.8
12	+23.391	+4.988			40	+33.404	+26.268	65 1305	7.8	11	+42.212	+46.228			10	+53.931	+27.739		
12	+23.563	+36.386			11	+33.532	+20.082			25	+42.551	+56.221	64 1254	9.6	12	+54.104	+45.512		
15	+23.622	+63.172			13	+33.843	+11.116			26	+42.649	+57.544	64 1255	9.9	14	+54.139	+12.825		
10	+24.321	+57.917			11	+33.885	+49.212			9	+42.691	+56.348			15	+54.419	+60.509	64 1263	9.8
12	+24.378	+49.543			11	+33.907	+46.542			11	+42.692	+34.491			15	+54.426	+61.256	64 1264	9.8
11	+24.981	+52.837			9	+34.009	+40.740			12	+42.915	+8.523			14	+54.681	+3.667		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651,					711,					771,					831,			
11	+54'771	+30'319			10	-56'347	-13'795			13	-42'312	-6'189			10	-31'695	-41'725		
11	+54'912	+21'889			17	-56'343	-9'447	66 1174	9'5	9	-42'002	-63'130			10	-31'627	-29'722		
9	+55'256	+60'588			9	-56'342	-48'402			10	-41'914	-14'624			12	-31'606	-37'600		
9	+55'385	+24'470			48	-56'212	-47'954	66 1172	8'5	21	-41'540	-11'784	66 1182	9'4	9	-31'571	-7'882		
11	+55'494	+62'001	64 1266	9'9	10	-55'829	-13'148			28	-41'054	-12'241	66 1183	9'2	9	-31'494	-30'574		
15	+55'580	+3'432			10	-55'355	-43'871			13	-40'926	-25'934			12	-31'231	-55'029		
15	+55'848	+0'499			12	-55'345	-29'432			10	-40'414	-13'391			9	-31'036	-55'981		
13	+55'942	+6'364			9	-55'328	-45'138			10	-40'178	-14'702			15	-30'938	-20'417	66 1190	9'9
11	+56'576	+29'715			11	-55'282	-23'444			9	-40'172	-25'736			12	-30'566	-43'007		
26	+56'589	+43'278	65 1326	9'4	9	-55'034	-2'102			9	-40'041	-4'549			16	-30'530	-3'312	65 1256	9'5
	661					721					781					841			
15	+56'606	+21'939	65 1327	9'9	12	-54'853	-25'863			11	-40'009	-20'075			11	-30'001	-40'071		
13	+57'841	+21'291			9	-54'546	-51'252			10	-39'913	-27'856			9	-29'733	-25'158		
14	+58'165	+20'348			9	-54'141	-34'767			12	-39'810	-32'306			12	-29'605	-9'057		
13	+58'442	+57'231	64 1272	9'7	10	-53'910	-37'626			10	-39'640	-6'253			14	-29'446	-25'746		
13	+58'445	+36'210	65 1328	9'9	10	-52'860	-14'936			10	-39'538	-21'882			44	-29'097	-6'870	65 1259	8'3
13	+58'656	+28'095			9	-52'339	-25'838			12	-39'414	-52'525			9	-28'933	-23'445		
12	+59'650	+62'638	64 1274	9'8	9	-52'287	-25'864			12	-39'169	-21'139			15	-28'924	-49'761	66 1192	9'7
15	+59'780	+43'471	65 1329	9'7	11	-51'545	-17'238			10	-39'074	-7'807			13	-28'338	-44'974		
11	+60'352	+3'815			11	-51'210	-34'591			11	-38'602	-9'869			11	-27'947	-23'701		
9	+60'680	+5'836			16	-50'672	-4'747	65 1242	9'7	11	-38'491	-23'936			9	-27'839	-57'373		
	671					731					791					851			
9	+60'925	+30'602			9	-50'465	-16'333			9	-38'359	-6'729			14	-27'490	-14'444		
11	+61'223	+22'096			50	-50'308	-63'793	66 1176	8'5	10	-38'356	-52'599			10	-27'176	-19'289		
11	+61'403	+25'565			9	-50'271	-3'085			16	-38'317	-15'663	66 1184	9'9	9	-26'905	-44'822		
9	+61'809	+56'575			12	-50'078	-2'079			11	-38'276	-28'516			9	-26'826	-22'739		
11	+61'899	+28'295			12	-49'994	-4'385			10	-38'251	-18'758			9	-26'684	-44'638		
15	+62'389	+31'817	65 1331	9'5	9	-49'684	-22'013			11	-38'046	-46'673			9	-26'463	-44'438		
12	+62'421	+34'627			13	-49'450	-40'272			12	-37'617	-26'480			12	-26'135	-11'824		
9	+62'702	+35'805			9	-49'298	-39'097			9	-37'442	-2'643			9	-26'088	-33'005		
9	+62'762	+5'348			12	-49'148	-9'123			12	-37'115	-28'898			13	-25'949	-7'371		
15	+62'778	+16'897	65 1333	9'8	9	-48'445	-0'940			9	-36'570	-18'798			59	-25'836	-47'055	66 1194	7'0
	681					741					801					861			
13	+62'915	+8'344			9	-48'261	-39'665			9	-36'277	-29'315			11	-25'776	-64'029		
12	+63'048	+10'298			13	-48'221	-1'062			12	-35'671	-28'102			15	-25'361	-16'021		
12	+63'182	+45'221	65 1332	9'8	9	-48'190	-6'597			15	-35'476	-22'085			13	-25'163	-15'705		
12	+63'359	+33'263			15	-48'184	-19'724	66 1177	9'9	24	-35'357	-20'105	66 1185	9'4	9	-25'075	-20'641		
13	+63'553	+7'068			12	-48'060	-37'859			10	-35'336	-8'991			12	-24'345	-55'057		
9	+64'372	+31'138			11	-47'927	-31'575			12	-34'803	-4'277			10	-24'291	-24'006		
10	+64'722	+23'939			9	-47'583	-44'273			15	-34'539	-55'297	66 1186	9'6	11	-24'090	-46'516		
10	-64'729	-16'263			10	-47'336	-55'111			10	-34'526	-0'602			9	-24'079	-20'020		
11	-64'589	-57'070			9	-47'157	-22'080			9	-34'220	-38'891			25	-23'954	-31'657	66 1195	9'3
9	-64'369	-44'717			12	-46'921	-3'381			9	-34'182	-5'109			9	-23'582	-54'731		
	691					751					811					871			
9	-63'935	-33'479			11	-46'877	-42'235			12	-34'034	-6'077			10	-23'314	-41'134		
47	-63'854	-6'369	65 1234	9'0	13	-46'818	-38'782			9	-33'881	-30'233			14	-23'314	-17'445		
38	-63'570	-20'401	66 1167	9'4	12	-46'358	-9'989			12	-33'880	-26'507			9	-23'258	-10'929		
9	-63'242	-17'524			12	-45'983	-61'239	66 1178	9'9	16	-33'754	-34'212	66 1187	9'6	15	-22'999	-5'690	65 1263	9'9
11	-61'156	-0'306			9	-45'617	-7'185			9	-33'681	-6'481			21	-22'504	-25'522	66 1196	9'5
12	-60'015	-2'940			10	-45'494	-5'763			24	-33'550	-9'309	66 1188	9'2	12	-22'458	-51'083		
11	-59'936	-20'132			12	-45'325	-32'531			9	-33'462	-11'900			10	-22'371	-58'581		
11	-59'730	-22'582			15	-44'693	-54'431	66 1179	9'5	13	-33'229	-25'012			10	-22'370	-18'695		
12	-59'566	-2'420			11	-44'472	-22'598			21	-33'195	-1'610	65 1254	9'4	12	-22'206	-37'998		
15	-59'372	-31'447	66 1168	9'6	12	-44'462	-13'956			9	-33'126	-41'727			24	-22'158	-11'974	66 1197	9'4
	701					761					821					881			
12	-59'327	-31'799	66 1169	9'9	11	-44'311	-1'034			12	-33'009	-51'989			11	-21'601	-49'417		
12	-59'162	-41'837			10	-44'165	-4'121			9	-32'956	-33'516			13	-21'591	-54'792		
9	-58'901	-45'392			11	-44'134	-5'939			11	-32'839	-55'353			10	-21'390	-28'654		
33	-58'357	-4'962	65 1236	9'3	28	-44'010	-2'309	65 1246	9'2	30	-32'737	-36'251	66 1189	9'2	9	-21'197	-57'588		
9	-58'162	-51'019			24	-43'619	-39'977	66 1180	9'5	9	-32'399	-14'704			12	-20'742	-54'187		
9	-57'686	-0'526			9	-43'198	-46'605			12	-32'395	-25'844			10	-20'569	-22'058		
41	-57'408	-15'138	66 1171	9'0	9	-43'148	-59'992			10	-32'308	-52'375			17	-20'513	-11'106	66 1199	9'5
11	-57'320	-19'468			16	-42'960	-33'383	66 1181	9'6	9	-32'196	-0'052			11	-20'314	-64'601		
15	-57'283	-28'312	66 1170	9'8	10	-42'545	-50'524			15	-32'190	-33'571			15	-20'271	-49'025	66 1198	9'5
33	-57'275	-11'116	66 1173	9'5	12	-42'383	-7'485			10	-31'875	-44'617			15	-20'252	-8'912		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	891					951					1011					1071			
14	-20°228	-49°080			29	-8°551	-35°727	66 1204	9.4	13	+4°373	-45°184			11	+15°623	-37°530		
10	-20°196	-42°575			13	-8°535	-51°921			9	+4°930	-57°825			9	+15°692	-9°371		
10	-20°166	-28°930			15	-8°507	-57°032			12	+4°961	-42°317			9	+15°801	-16°616		
9	-19°587	-19°237			12	-8°428	-42°713			10	+5°104	-23°868			12	+15°809	-18°048		
12	-19°265	-36°024			9	-8°228	-8°920			10	+5°131	-17°066			9	+15°873	-14°982		
9	-18°986	-6°506			10	-8°007	-50°930			11	+5°153	-7°959			16	+15°978	-52°227	66 1216	9.6
9	-18°842	-9°931			10	-7°736	-32°173			11	+5°181	-34°943			9	+16°020	-1°973		
11	-18°617	-9°968			28	-7°364	-16°991	66 1205	9.2	15	+5°328	-11°474			15	+16°086	-53°500	66 1217	9.9
11	-18°020	-21°596			13	-7°272	-48°904			10	+5°356	-18°206			11	+16°228	-40°579		
9	-17°898	-29°897			9	-7°158	-48°143			9	+6°651	-42°252			9	+16°285	-31°093		
	901					961					1021					1081			
10	-17°599	-42°498			12	-7°136	-6°977			12	+6°722	-55°903			12	+16°338	-34°765		
27	-17°390	-30°260	66 1200	9.2	9	-7°002	-41°784			12	+6°849	-30°453			13	+16°564	-13°185		
11	-17°010	-37°033			9	-6°871	-52°279			11	+7°091	-6°379			15	+16°739	-7°497		
12	-16°938	-59°027			11	-6°664	-22°188			22	+7°247	-60°971	66 1211	9.2	12	+17°548	-49°231		
10	-16°617	-51°188			9	-6°536	-6°673			12	+7°791	-28°536			10	+17°759	-34°147		
9	-16°442	-52°334			9	-6°424	-37°183			12	+7°805	-43°821			9	+17°770	-27°993		
11	-16°300	-62°248			10	-6°238	-43°344			9	+7°919	-6°845			10	+18°178	-2°585	65 1296	9.6
12	-15°926	-23°501			10	-6°094	-16°193			9	+8°178	-50°170			12	+18°215	-54°877		
9	-15°826	-6°782			13	-5°934	-9°028			13	+8°195	-51°927			9	+18°293	-33°484		
10	-15°596	-56°109			9	-5°873	-40°424			14	+8°238	-19°715			9	+18°350	-21°834		
	911					971					1031					1091			
10	-15°484	-31°116			10	-5°766	-14°068			13	+8°554	-13°596			10	+18°368	-49°987		
11	-14°984	-16°158			12	-5°762	-27°876			12	+8°654	-52°251			9	+18°399	-4°397		
12	-14°940	-31°045			12	-5°623	-57°838			11	+8°895	-5°780			30	+18°570	-55°632	66 1218	8.9
9	-14°910	-12°699			10	-5°205	-26°704			16	+9°193	-64°965	66 1212	9.5	10	+18°685	-58°037		
12	-14°890	-34°505			9	-5°168	-17°019			11	+9°373	-29°907			10	+18°706	-62°910		
10	-14°875	-36°593			10	-4°845	-25°273			9	+9°462	-20°744			9	+18°974	-2°705		
13	-14°702	-58°288			10	-4°318	-35°501			15	+9°752	-46°497	66 1213	9.4	10	+19°080	-34°335		
9	-14°614	-29°289			21	-4°233	-16°617	66 1206	9.8	26	+10°329	-44°979	66 1214	9.4	17	+19°439	-21°413	66 1219	9.9
12	-14°532	-48°456			13	-3°944	-33°341			9	+10°329	-28°019			9	+19°664	-39°856		
9	-14°402	-63°829			14	-3°638	-29°350			12	+10°795	-20°357			13	+19°672	-28°596		
	921					981					1041					1101			
38	-14°368	-12°021	66 1201	8.8	9	-3°252	-3°608			11	+11°087	-27°858			9	+19°970	-21°116		
10	-14°230	-51°670			10	-3°181	-60°107			9	+11°089	-29°136			10	+20°310	-38°593		
10	-13°921	-27°997			11	-3°091	-8°150			10	+11°139	-26°710			9	+20°504	-34°698		
12	-13°778	-28°653			12	-3°089	-56°647			9	+11°338	-37°431			12	+20°645	-46°800		
11	-13°642	-2°253			9	-2°614	-4°009			10	+11°371	-33°701			11	+21°031	-64°958		
9	-13°296	-7°612			12	-2°192	-31°107			10	+11°562	-51°426			9	+21°036	-13°115		
16	-13°226	-1°883	65 1268	9.9	12	-1°927	-40°490			10	+11°644	-32°287			9	+21°331	-36°131		
10	-13°191	-54°622			9	-1°814	-22°193			11	+11°946	-55°359			15	+21°526	-10°806	66 1220	9.9
9	-13°184	-13°935			10	-1°337	-45°258			14	+12°146	-33°017			9	+21°640	-8°313		
15	-12°952	-27°403	66 1202	9.9	9	-1°012	-6°534			9	+12°172	-42°091			13	+21°688	-34°636		
	931					991					1051					1111			
12	-12°934	-35°629			46	-0°881	-39°256	66 1207	8.5	12	+12°225	-44°717			20	+21°940	-29°651	66 1221	9.7
10	-12°808	-0°458			11	+0°449	-51°755			9	+12°441	-29°908			9	+22°034	-8°723		
10	-12°740	-34°761			9	+0°955	-26°014			13	+12°597	-39°671			13	+22°166	-7°017		
9	-11°973	-9°798			9	+0°990	-53°356			12	+13°192	-12°900			14	+22°220	-43°352		
9	-11°517	-6°100			12	+1°271	-7°953			10	+13°214	-47°097			9	+22°304	-49°539		
15	-11°433	-19°157	66 1203	9.7	39	+1°409	-48°520	66 1208	8.7	13	+13°243	-44°445			10	+22°698	-57°148		
12	-11°375	-19°275			9	+1°411	-9°815			12	+13°294	-39°415			10	+23°547	-12°283		
11	-11°246	-48°829			10	+1°542	-55°111			13	+13°501	-62°963			38	+23°858	-18°040	66 1222	8.6
9	-11°008	-24°682			13	+1°674	-60°256			12	+13°793	-55°683			37	+23°966	-27°718	66 1223	8.8
9	-10°815	-43°229			9	+1°818	-39°273			58	+14°093	-5°661	65 1291	8.0	14	+23°979	-22°111		
	941					1001					1061					1121			
10	-10°668	-4°179			48	+1°998	-47°879	66 1209	8.5	11	+14°101	-7°212			9	+24°223	-46°666		
10	-10°178	-25°105			9	+2°051	-43°512			9	+14°155	-8°301			12	+24°532	-34°598		
9	-10°141	-8°751			44	+2°829	-23°073	66 1210	8.8	9	+14°212	-16°860			14	+24°632	-43°980		
11	-9°803	-19°761			12	+2°900	-7°205			10	+14°336	-45°225			10	+25°028	-43°470		
9	-9°732	-8°682			12	+3°271	-61°630			12	+14°595	-45°003			9	+25°381	-62°962		
11	-9°239	-40°758			9	+3°378	-42°944			13	+14°655	-0°456			10	+25°700	-42°838		
12	-9°143	-37°117			10	+3°596	-36°051			9	+14°765	-41°363			10	+25°889	-42°828		
10	-8°758	-24°674			9	+3°996	-57°908			10	+14°812	-52°179			10	+26°014	-32°957		
9	-8°679	-9°534			11	+4°026	-54°857			23	+15°076	-2°047	65 1293	9.6	12	+26°104	-29°270		
12	-8°586	-34°988			9	+4°281	-64°472			12	+15°362	-36°102			11	+26°195	-22°344		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1131					1191					1251					1311			
33	+26° 299	-51° 497	66 1224	9° 0	10	+36° 046	-6° 600			10	+47° 513	-28° 846	66 1238	9° 2	15	+59° 383	-31° 520	66 1256	9° 6
9	+26° 321	-9° 737			9	+36° 080	-18° 271			32	+47° 556	-10° 794			11	+59° 628	-35° 490		
10	+26° 522	-19° 982			12	+36° 332	-6° 060			9	+47° 593	-11° 342			13	+59° 806	-43° 007	66 1258	9° 8
11	+26° 806	-9° 427			10	+36° 499	-19° 788			10	+47° 752	-15° 884			11	+60° 152	-40° 613		
9	+26° 826	-6° 427			10	+36° 518	-14° 901			9	+47° 859	-4° 997			9	+61° 113	-50° 674		
11	+27° 049	-54° 072			11	+36° 790	-64° 287			10	+47° 952	-44° 636			11	+61° 481	-22° 048		
10	+27° 084	-16° 463			9	+37° 021	-8° 635			12	+48° 114	-36° 961			10	+61° 720	-6° 312		
9	+27° 094	-21° 220			10	+37° 036	-21° 831			12	+48° 314	-21° 041			9	+61° 852	-3° 558		
9	+27° 134	-45° 960			15	+37° 079	-30° 566			11	+48° 365	-49° 582			9	+61° 881	-45° 441		
11	+27° 388	-19° 453			9	+37° 238	-7° 961			9	+48° 586	-14° 696			11	+61° 983	-51° 036	66 1259	9° 9
	1141					1201					1261					1321			
12	+27° 800	-61° 377			10	+37° 785	-19° 220			117	+48° 668	-24° 877	66 1243	6° 0	9	+62° 179	-59° 771		
15	+28° 022	-30° 209			16	+37° 839	-34° 438	66 1234	9° 9	10	+48° 674	-31° 497			12	+62° 270	-6° 633		
30	+28° 076	-54° 145	66 1225	9° 0	9	+38° 054	-55° 542			11	+48° 854	-15° 532			15	+62° 280	-5° 104	65 1334	9° 6
10	+28° 384	-28° 805			9	+38° 110	-20° 587			9	+48° 870	-18° 560			10	+62° 646	-40° 730		
14	+28° 395	-34° 980			11	+38° 116	-9° 598			11	+49° 257	-23° 129			11	+63° 309	-22° 057		
12	+28° 488	-35° 963			21	+38° 440	-15° 794	66 1233	9° 6	9	+49° 334	-24° 652			12	+63° 530	-8° 345		
11	+28° 511	-4° 892			12	+38° 461	-33° 310			12	+49° 411	-1° 749			9	+63° 667	-14° 933		
11	+28° 793	-3° 239			12	+38° 464	-6° 063			10	+49° 948	-18° 174			10	+64° 091	-33° 919		
14	+29° 059	-10° 323			9	+38° 646	-31° 954			15	+50° 153	-23° 615	66 1245	9° 5	14	+64° 182	-4° 472	65 1335	9° 8
11	+29° 460	-13° 192			9	+38° 774	-36° 358			35	+50° 216	-14° 650	66 1244	9° 1	9	+64° 460	-26° 959		
	1151					1211					1271					1331			
11	+29° 891	-44° 848			9	+38° 904	-18° 622			9	+50° 674	-33° 718			9	+64° 684	-7° 298		
12	+29° 985	-55° 851			12	+39° 083	-32° 782			9	+50° 941	-15° 087							
10	+30° 089	-48° 481			14	+39° 307	-59° 606	66 1235	9° 9	14	+51° 212	-37° 461	66 1246	9° 8					
9	+30° 196	-2° 691			9	+40° 141	-19° 280			10	+51° 302	-32° 004							
11	+30° 227	-62° 096			9	+40° 276	-6° 763			9	+51° 446	-53° 565							
9	+30° 323	-13° 458			9	+40° 429	-57° 126			14	+51° 522	-26° 574							
9	+30° 794	-53° 653			17	+40° 442	-5° 302	65 1312	9° 6	9	+51° 522	-7° 525							
9	+31° 096	-44° 522			12	+40° 725	-15° 148			10	+52° 110	-0° 342							
62	+31° 158	-40° 713	66 1226	7° 2	12	+40° 742	-8° 357			14	+52° 112	-5° 113	65 1324	9° 8					
9	+31° 338	-36° 311			12	+40° 833	-35° 148			10	+52° 113	-58° 704							
	1161					1221					1281								
24	+31° 673	-51° 591	66 1228	9° 3	9	+40° 852	-43° 196			15	+52° 218	-48° 447	66 1248	9° 6					
9	+31° 700	-48° 684			9	+41° 466	-52° 252			10	+52° 708	-39° 010							
10	+31° 787	-4° 024			9	+41° 570	-51° 058			9	+52° 736	-9° 295							
16	+31° 858	-22° 627	66 1227	9° 8	9	+41° 717	-15° 823			15	+52° 763	-36° 604	66 1249	9° 7					
15	+32° 002	-12° 676			10	+41° 899	-33° 636			46	+52° 928	-9° 408	66 1247	8° 5					
9	+32° 042	-11° 024			13	+41° 996	-38° 635			11	+53° 346	-52° 577							
12	+32° 045	-11° 573			10	+42° 026	-1° 465			11	+53° 680	-2° 369							
12	+32° 123	-6° 261			10	+42° 111	-17° 038			12	+53° 713	-43° 507							
9	+32° 311	-18° 929			12	+42° 114	-27° 301			9	+53° 793	-37° 641							
10	+32° 479	-15° 366			12	+42° 262	-27° 319			9	+53° 876	-11° 580							
	1171					1231					1291								
13	+32° 536	-42° 620			9	+42° 380	-4° 761			11	+53° 878	-30° 674							
10	+32° 584	-21° 021			9	+42° 824	-2° 755			13	+53° 887	-16° 029	66 1250	9° 9					
9	+33° 148	-36° 727			15	+42° 837	-2° 840			12	+54° 119	-18° 765							
10	+33° 646	-27° 095			10	+43° 021	-54° 196	65 1314	9° 9	12	+54° 128	-60° 976	66 1252	9° 9					
9	+34° 012	-35° 081			13	+43° 574	-41° 630			30	+54° 257	-9° 986	66 1251	9° 2					
12	+34° 234	-46° 621			10	+43° 582	-42° 346			10	+54° 265	-35° 651							
9	+34° 235	-14° 684			10	+43° 824	-32° 325			9	+54° 795	-33° 674							
9	+34° 366	-22° 733			11	+44° 284	-26° 155			12	+54° 818	-2° 555							
12	+34° 413	-7° 463			9	+44° 398	-3° 979			9	+55° 682	-54° 189							
12	+34° 531	-18° 991			10	+44° 498	-41° 722			9	+55° 823	-8° 388							
	1181					1241					1301								
10	+34° 652	-34° 446			9	+44° 771	-7° 809			9	+56° 250	-44° 853							
9	+34° 684	-41° 959			14	+44° 774	-60° 090	66 1237	9° 6	34	+56° 546	-41° 807	66 1254	9° 4					
13	+34° 982	-8° 119			13	+45° 059	-35° 161			12	+56° 702	-40° 797	66 1253	9° 9					
26	+35° 309	-55° 487	66 1230	9° 4	9	+45° 916	-22° 849			12	+56° 904	-9° 674							
40	+35° 360	-62° 496	66 1231	8° 6	12	+46° 032	-59° 478	66 1240	9° 8	11	+57° 200	-49° 781	66 1255	9° 8					
17	+35° 399	-37° 437	66 1229	9° 9	10	+46° 447	-15° 096			13	+58° 260	-7° 721	65 1330	9° 7					
45	+35° 439	-62° 188	66 1232	8° 7	13	+46° 677	-43° 006	66 1239	9° 9	52	+58° 608	-61° 145	66 1257	9° 2					
11	+35° 455	-4° 445			9	+46° 829	-29° 687			11	+58° 677	-6° 080							
12	+35° 483	-30° 644			13	+47° 342	-9° 111			11	+58° 678	-15° 771							
10	+35° 986	-2° 315			14	+47° 507	-48° 402	66 1241	9° 6	9	+59° 044	-31° 232							

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 10 ^h 30 ^m , - 66°. Plate 227. 1892, March 26. PROVISIONAL CONSTANTS. a = - .01152 d = + .00204 b = - .00198 e = - .01170 c = - .1664 f = - .1269 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																			
51					111					171									
9	-40°464	+ 3°302			9	-19°020	+ 8°216			9	+ 8°508	+35°974	65 1413	9°9					
9	-40°070	+ 3°127			9	-18°713	+20°926			15	+ 8°753	+ 2°474	65 1415	9°6					
12	-39°941	+ 4°852	65 1347	9°8	11	-17°813	+28°808	65 1374	9°7	12	+ 9°065	+36°136	65 1414	9°8					
9	-39°488	+ 3°956			15	-17°345	+50°385	65 1375	9°4	9	+ 9°123	+12°700							
16	-39°339	+28°627	65 1348	9°2	15	-17°047	+15°827	65 1376	9°5	9	+ 9°321	+ 2°985							
9	-39°218	+57°174	64 1297	9°8	12	-16°941	+38°742	65 1377	9°7	16	+ 9°335	+47°068	65 1416	9°4					
15	-38°816	+11°807	65 1349	9°6	11	-16°537	+19°429	65 1378	9°8	9	+ 9°718	+32°076							
17	-38°228	+20°558	55 1350	9°1	9	-16°519	+46°496	65 1379	9°9	18	+ 9°918	+42°476	65 1417	9°0					
15	-38°133	+49°620	65 1351	9°4	11	-15°977	+42°375	65 1380	9°8	15	+10°027	+26°243	65 1418	9°6					
16	-37°907	+48°940	65 1352	9°1	11	-15°757	+10°548	65 1381	9°8	16	+11°081	+23°003	65 1419	9°4					
61					121					181									
9	-36°654	+40°862	65 1353	9°7	11	-15°082	+ 3°274	65 1382	9°7	9	+11°173	+27°298	65 1420	9°5					
9	-36°504	+ 5°216			19	-14°932	+ 7°758	65 1383	9°0	9	+11°256	+ 0°470							
64	-36°212	+48°640	65 1354	6°6	10	-14°879	+ 9°274	65 1384	9°8	9	+11°311	+ 5°285							
9	-35°369	+41°634			9	-14°377	+36°626			15	+11°339	+13°830	65 1421	9°5					
16	-35°002	+ 6°712	65 1355	9°4	9	-13°840	+52°176			10	+12°402	+12°081	65 1422	9°9					
9	-34°725	+11°619			12	-13°232	+30°590	65 1386	9°6	11	+13°031	+ 0°405							
9	-34°625	+39°434			9	-12°822	+17°013			9	+13°313	+15°403							
9	-34°610	+42°764			11	-12°004	+40°107	65 1388	9°0	9	+13°764	+50°109							
13	-34°031	+ 9°836	65 1356	9°8	11	-11°768	+20°531	65 1389	9°8	11	+14°332	+35°926	65 1423	9°8					
9	-33°897	+58°130			9	-11°052	+21°479			9	+14°371	+13°257							
71					131					191									
10	-33°845	+54°789	64 1302	9°8	14	-10°095	+14°904	65 1390	9°0	9	+14°444	+59°779							
16	-33°655	+63°673	64 1304	9°2	16	- 9°486	+ 0°644	65 1391	9°6	9	+14°830	+13°598							
9	-33°638	+23°228			9	- 9°438	+14°151			9	+14°884	+41°526	65 1424	9°9					
9	-33°236	+40°262			32	- 9°372	+ 3°904	65 1392	8°6	14	+16°116	+24°393	65 1425	9°8					
13	-33°096	+29°112	65 1357	9°6	9	- 7°772	+35°755			9	+16°229	+13°495							
9	-32°827	+34°720			9	- 7°684	+ 1°202			9	+16°275	+ 3°010							
9	-32°758	+35°421			17	- 5°927	+44°860	65 1394	9°1	9	+16°809	+53°693							
10	-31°796	+13°445	65 1358	9°9	17	- 5°515	+ 0°587	65 1395	9°1	12	+17°778	+30°725	65 1426	9°6					
9	-31°170	+41°944			9	- 5°094	+42°138	65 1396	9°7	16	+18°164	+49°512	65 1427	9°2					
11	-30°949	+ 1°000	65 1359	9°9	16	- 4°485	+19°643	65 1397	9°6	9	+18°532	+12°399							
81					141					201									
24	-30°440	+49°511	65 1360	8°9	9	- 3°825	+48°586	65 1398	9°9	9	+18°573	+33°051							
9	-29°229	+61°299			11	- 3°810	+43°256	65 1399	9°6	16	+18°847	+28°515	65 1429	9°5					
9	-28°850	+16°557			15	- 3°770	+11°839	65 1400	9°6	9	+18°859	+51°646							
9	-27°925	+11°091			16	- 3°684	+21°835	65 1401	9°5	10	+19°408	+43°826	65 1430	9°9					
9	-27°383	+13°364			17	- 3°434	+20°321	65 1402	9°2	9	+20°516	+40°602							
11	-27°266	+47°065	65 1361	9°6	12	- 2°880	+28°950	65 1403	9°7	9	+20°672	+18°144							
9	-26°780	+50°335	65 1362	9°9	16	- 2°390	+ 5°726	65 1404	9°5	13	+20°682	+27°571	65 1431	9°7					
9	-26°348	+23°311			9	- 2°043	+54°091			15	+20°884	+12°498	65 1432	9°6					
11	-25°906	+47°240	65 1363	9°8	11	- 1°169	+14°251	65 1405	9°8	9	+21°433	+ 6°275							
9	-25°400	+48°578			9	- 1°146	+ 5°950			17	+23°584	+61°663	64 1366	9°2					
91					151					211									
9	-25°281	+ 2°640			9	- 0°880	+19°103			9	+23°862	+10°433							
16	-25°162	+24°802	65 1364	9°2	9	- 0°676	+21°799			11	+23°982	+54°970	64 1367	9°7					
9	-24°949	+44°209			12	- 0°384	+58°963	64 1338	9°6	9	+24°036	+13°699							
9	-24°509	+ 5°125			9	- 0°323	+10°738			9	+24°230	+63°534							
9	-23°945	+34°492			10	- 0°174	+42°287	65 1406	9°9	9	+24°693	+33°407							
9	-23°771	+16°699			9	+ 0°274	+31°579			9	+25°321	+22°961							
21	-23°543	+38°607	65 1365	8°8	9	+ 0°580	+38°668	65 1407	9°9	15	+26°426	+ 6°922	65 1434	9°4					
9	-23°445	+ 2°995			16	+ 2°170	+13°927	65 1408	9°5	16	+27°142	+16°581	65 1435	9°2					
17	-22°805	+38°374	65 1366	9°1	9	+ 2°617	+52°149			9	+27°241	+13°084							
9	-22°786	+23°242			10	+ 3°476	+ 5°176			9	+27°683	+17°063							
101					161					221									
9	-22°325	+12°614			9	+ 3°602	+26°356			9	+28°111	+27°813							
12	-22°317	+13°944	65 1367	9°6	9	+ 5°523	+56°656	64 1344	9°9	9	+28°949	+ 3°435							
10	-21°991	+15°125	65 1369	9°8	16	+ 6°046	+33°650	65 1410	9°5	9	+30°627	+ 7°957							
19	-21°991	+ 3°162	65 1368	8°5	9	+ 6°079	+55°339	64 1347	9°9	9	+30°724	+46°796	65 1436	9°9					
11	-21°773	+16°085	65 1370	9°9	10	+ 6°372	+19°312			9	+31°218	+17°386							
10	-21°482	+61°372	64 1312	9°7	9	+ 6°822	+33°666			9	+31°371	+ 8°292							
9	-20°953	+13°371			10	+ 6°881	+57°251	64 1348	9°7	11	+31°656	+27°771	65 1438	9°9					
9	-19°877	+11°033			11	+ 7°419	+ 0°958	65 1411	9°8	15	+32°039	+54°334	64 1375	9°5					
9	-19°569	+59°037			11	+ 7°626	+19°383	65 1412	9°8	9	+32°321	+50°897	65 1439	9°8					
15	-19°416	+11°644	65 1372	9°6	9	+ 8°270	+ 6°184			9	+33°197	+55°560	64 1377	9°9					

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231					291					351					411			
9	+33°035	+25°371			17	-56°076	-9°767	66 1251	9°2	9	-26°886	-10°333			17	+8°170	-50°785	66 1321	9°2
9	+33°747	+26°619			10	-56°016	-15°835	66 1250	9°9	11	-26°682	-9°781	66 1283	9°7	12	+8°587	-53°932	66 1323	9°6
9	+36°655	+45°171	65 1441	9°9	11	-55°702	-36°445	66 1249	9°7	9	-26°574	-45°868			9	+8°612	-43°112		
11	+30°917	+15°891	65 1442	9°8	9	-55°610	-18°539			17	-26°078	-11°264	66 1285	8°5	9	+8°644	-8°624	66 1322	9°9
9	+30°941	+35°037			11	-55°416	-48°272	66 1248	9°6	19	-26°023	-11°299			10	+9°285	-29°763		
9	+37°972	+61°494	64 1389	9°8	9	-53°466	-9°272			10	-25°810	-38°549	66 1284	9°9	18	+9°400	-7°906	66 1324	9°2
18	+38°398	+1°616	65 1444	9°2	9	-52°668	-60°642	66 1252	9°9	11	-25°034	-27°191	66 1287	9°8	28	+9°838	-39°269	66 1326	8°8
10	+38°409	+30°685			10	-52°223	-7°236	65 1330	9°7	10	-21°684	-58°206	66 1288	9°8	12	+9°938	-21°466	66 1325	9°7
9	+40°544	+27°356	65 1446	9°8	9	-51°944	-5°569			14	-21°264	-4°027	65 1371	9°5	12	+10°041	-24°908	66 1327	9°8
9	+40°616	+6°278			12	-51°568	-41°364	66 1254	9°4	15	-21°126	-24°791	66 1289	9°5	13	+10°121	-43°841	66 1328	9°6
	241					301					361					421			
9	+40°788	+8°477			9	-51°500	-40°354	66 1253	9°9	9	-20°683	-4°375			11	+10°323	-52°025	66 1330	9°7
10	+40°864	+28°413	65 1447	9°4	9	-50°323	-49°258	66 1255	9°8	12	-19°105	-50°404	66 1290	9°6	10	+10°468	-44°520	66 1331	9°9
9	+41°008	+9°811			11	-49°465	-30°904	66 1256	9°6	11	-18°551	-37°313			19	+10°469	-53°634	66 1332	9°2
10	+41°022	+28°740	65 1448	9°8	12	-48°399	-4°343	65 1334	9°6	10	-18°459	-13°080			24	+10°551	-17°007	66 1329	9°0
10	+42°455	+22°740	65 1449	9°2	9	-48°289	-5°872			10	-18°385	-21°142			13	+10°641	-56°763	66 1333	9°4
10	+42°586	+7°903	65 1450	9°9	9	-48°239	-42°321	66 1258	9°8	16	-18°321	-0°756	65 1373	9°4	14	+11°347	-59°440	66 1334	9°3
9	+43°312	+31°394			15	-48°162	-60°517	66 1257	9°2	9	-17°987	-17°535			10	+11°838	-33°530	66 1335	9°9
11	+44°376	+21°724	65 1451	9°7	9	-48°023	-21°296			80	-17°840	-28°593	66 1291	7°4	17	+12°623	-43°110	66 1336	9°3
11	+45°207	+7°112	65 1454	9°7	9	-46°935	-7°481			9	-17°561	-48°386	66 1292	9°9	18	+13°444	-48°284	66 1337	9°3
12	+45°383	+35°451	65 1452	9°6	11	-46°556	-3°566	65 1335	9°8	21	-15°721	-21°305	66 1293	9°2	18	+15°203	-32°663	66 1338	9°2
	251					311					371					431			
9	+45°432	+1°754			9	-45°516	-50°187	66 1259	9°9	17	-15°045	-59°745	66 1294	9°2	10	+15°436	-24°731		
9	+45°544	+29°118			11	-44°956	-2°612	65 1339	9°8	26	-14°730	-17°607	66 1295	8°8	9	+15°663	-37°692		
11	+45°590	+23°384	65 1453	9°7	12	-44°411	-1°446	65 1340	9°5	11	-14°666	-6°869	65 1385	9°8	11	+15°684	-33°872	66 1339	9°8
12	+46°818	+30°119	65 1456	9°6	10	-44°197	-6°497	65 1341	9°8	9	-14°141	-27°555			9	+16°571	-19°213		
32	+48°151	+25°170	65 1457	8°4	9	-44°156	-25°603			9	-14°127	-48°343			14	+17°576	-6°040	65 1428	9°5
10	+48°878	+60°872	64 1410	9°6	22	-43°457	-8°185	66 1260	9°0	16	-13°703	-34°810	66 1296	9°4	14	+18°167	-56°839	66 1340	9°3
9	+49°428	+12°630	65 1458	9°9	12	-42°968	-17°060	66 1261	9°8	12	-13°500	-27°984	66 1297	9°8	18	+18°623	-38°637	66 1341	9°2
15	+49°655	+63°179	64 1412	9°4	10	-42°064	-18°726			10	-13°282	-1°038	65 1387	9°8	11	+20°371	-11°214	66 1342	9°8
12	+51°197	+26°743	65 1460	9°6	9	-42°001	-27°753			9	-11°602	-15°059			19	+20°681	-4°862	65 1433	9°1
16	+51°521	+38°955	65 1459	9°2	11	-40°979	-41°176	66 1263	9°6	9	-10°861	-52°380			10	+21°921	-36°888	66 1343	9°8
	261					321					381					441			
10	+51°755	+23°306	65 1462	9°8	18	-40°545	-0°950	65 1345	9°2	11	-10°610	-59°240	66 1299	9°6	9	+22°061	-7°414		
12	+54°446	+27°804	65 1465	9°6	11	-39°980	-63°185	66 1264	9°4	9	-8°447	-37°746			9	+22°944	-1°111		
11	+54°459	+39°187	65 1464	9°5	11	-39°685	-22°418	66 1267	9°8	11	-7°865	-57°648	66 1300	9°7	11	+23°143	-16°092	66 1344	9°8
9	+55°943	+37°669	65 1466	9°6	11	-39°632	-39°588	66 1265	9°7	10	-7°778	-15°231			12	+23°630	-28°639	66 1345	9°7
9	+50°696	+25°688			17	-39°288	-43°052	66 1266	9°2	11	-6°747	-51°145	66 1301	9°7	22	+23°903	-46°596	66 1346	9°0
18	+56°956	+7°040	65 1467	9°1	9	-39°195	-27°488			18	-6°452	-26°674	66 1302	9°3	9	+24°603	-19°244		
9	+60°687	+32°366	65 1469	9°9	18	-38°697	-61°217	66 1268	9°1	32	-6°428	-3°200	65 1393	8°5	9	+25°381	-44°259	66 1347	9°9
10	+60°893	+52°668	64 1446	9°6	10	-38°510	-43°186	66 1269	9°8	11	-6°322	-51°482	66 1303	9°7	10	+26°255	-22°602		
11	+61°413	+42°269	65 1470	9°3	11	-37°942	-52°147	66 1270	9°6	10	-5°240	-57°875	66 1304	9°9	10	+26°605	-32°114	66 1348	9°9
15	+61°954	+21°605	65 1472	9°5	9	-37°561	-46°109			9	-3°895	-39°810			13	+27°848	-15°943	66 1349	9°6
	271					331					391					451			
11	+62°122	+43°252	65 1471	9°4	12	-37°460	-47°332	66 1271	9°6	10	-3°220	-55°853	66 1305	9°8	11	+30°254	-6°404	65 1437	9°9
9	+63°817	+14°088			9	-37°037	-22°354			11	-2°527	-40°552	66 1306	9°8	11	+30°275	-49°361	66 1350	9°6
9	+64°617	+31°838	65 1474	9°9	12	-36°930	-25°625	66 1272	9°8	11	-0°906	-39°543	66 1307	9°7	12	+33°328	-15°935	66 1351	9°6
11	+64°815	+45°724	65 1473	9°2	9	-36°296	-14°099			10	-0°656	-56°526	66 1308	9°9	9	+33°506	-60°045	66 1354	9°8
10	+64°855	+12°426	65 1475	9°7	14	-35°700	-20°072	66 1274	9°6	10	-0°191	-60°879	66 1309	9°7	11	+33°725	-7°248	65 1440	9°8
10	-63°032	-9°385			15	-35°516	-63°756	66 1273	9°2	11	+0°346	-33°901	66 1310	9°9	9	+33°757	-36°535		
22																			

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Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171					231					291					351			
12	-35°132	+15°230			12	-25°623	+47°050	65 1507	9°9	19	-16°557	+60°506	64 1493	9°5	12	-6°068	+9°589		
18	-35°011	+55°085	64 1475	9°5	11	-25°562	+25°757			10	-16°378	+38°852			20	-5°964	+1°786	65 1528	9°3
19	-34°875	+21°086	65 1494	9°5	11	-25°192	+1°620			16	-16°353	+11°811	65 1519	9°6	13	-5°947	+5°989	65 1529	9°8
12	-34°867	+26°212			9	-25°102	+31°843			10	-15°905	+25°152			11	-5°612	+9°305		
16	-34°661	+26°481	65 1495	9°7	12	-25°020	+6°103			12	-15°704	+44°156			9	-5°505	+27°149		
18	-34°457	+22°696	65 1496	9°6	34	-24°820	+36°787	65 1508	8°7	9	-15°702	+54°129			9	-5°109	+49°320		
9	-34°456	+19°327			9	-24°798	+89°345			9	-15°527	+39°402			19	-5°045	+52°510	65 1530	9°4
14	-34°368	+44°060	65 1497	9°8	9	-24°508	+26°432			10	-14°703	+41°128			12	-4°972	+54°579		
10	-34°296	+17°133			9	-24°456	+28°562			11	-14°653	+61°948			13	-4°784	+50°970	65 1531	9°8
11	-34°274	+5°289			9	-24°397	+40°180			9	-14°510	+55°597			11	-4°706	+63°240		
	181					241					301					361			
11	-34°179	+22°724			16	-24°387	+47°856	65 1510	9°6	9	-14°508	+22°010			9	-4°631	+15°219		
11	-34°114	+47°121			9	-24°360	+22°648			11	-14°139	+20°528			16	-4°359	+12°817	65 1532	9°5
10	-34°094	+36°631			11	-24°056	+4°294			9	-13°799	+2°755			9	-4°052	+29°335		
12	-33°832	+42°116			13	-23°698	+64°870			9	-13°633	+52°131			23	-4°023	+8°411	65 1533	9°4
12	-33°831	+26°965			11	-23°432	+60°860			9	-13°472	+32°470			11	-3°558	+23°686		
10	-33°764	+35°033			9	-23°174	+2°556			12	-13°417	+5°385			11	-3°377	+49°578		
13	-33°551	+57°473	64 1476	9°9	9	-23°136	+61°322			9	-13°343	+36°543			20	-3°356	+19°585	65 1534	9°6
10	-33°365	+23°208			9	-22°796	+49°167			9	-12°803	+58°127			10	-3°128	+55°713		
11	-33°026	+24°030			11	-22°586	+50°671			12	-12°515	+56°237	64 1497	9°9	13	-3°006	+29°979		
9	-32°927	+38°949			9	-22°509	+11°269			11	-12°485	+22°983			9	-2°650	+58°501		
	191					251					311					371			
11	-32°777	+21°088			12	-22°372	+39°673	65 1512	9°7	13	-12°425	+56°883	64 1498	9°8	10	-2°427	+32°372		
11	-32°553	+23°534			12	-22°213	+40°208			10	-12°192	+44°469			9	-2°362	+23°869		
11	-32°434	+39°507			11	-22°105	+32°669			10	-12°092	+39°916			11	-2°194	+22°915		
9	-32°345	+49°516			9	-21°647	+37°021			9	-12°086	+31°555			9	-2°184	+13°048		
15	-32°129	+64°862	64 1478	9°6	11	-21°606	+62°285			12	-12°041	+50°247			13	-2°175	+47°085	65 1535	9°9
18	-32°015	+50°002	65 1498	9°5	18	-21°520	+51°406	65 1513	9°6	10	-12°033	+21°216			9	-1°850	+58°329		
10	-32°002	+47°942			11	-21°245	+39°051			10	-11°712	+36°971			9	-1°710	+53°391		
11	-31°993	+20°248			10	-21°148	+21°781			11	-11°267	+46°166			11	-1°305	+53°109		
9	-31°753	+43°034			9	-21°050	+53°105			12	-10°816	+28°997			11	-1°250	+55°866		
9	-31°437	+33°510			18	-21°016	+64°564	64 1487	9°4	14	-10°782	+11°576	65 1520	9°8	11	-0°847	+40°203		
	201					261					321					381			
14	-31°373	+63°746	64 1479	9°6	9	-20°612	+20°910			9	-10°617	+46°215			11	-0°567	+38°655		
12	-31°124	+36°491			9	-20°436	+38°313			9	-10°054	+32°673			10	-0°550	+41°971		
13	-30°886	+31°299	65 1499	9°9	10	-20°432	+26°431			10	-9°856	+41°440			12	-0°476	+19°273		
9	-30°611	+53°959			16	-19°942	+10°323	65 1514	9°8	10	-9°607	+64°530			9	-0°298	+57°563		
11	-30°535	+1°129			10	-19°739	+61°203			12	-9°597	+47°900			9	-0°137	+31°505		
11	-30°259	+58°912			10	-19°597	+56°982			9	-9°377	+7°241			10	-0°129	+30°323		
14	-29°863	+14°962	65 1500	9°8	9	-19°555	+37°271			11	-9°175	+24°291			10	+0°316	+6°993		
14	-29°801	+62°676			34	-19°385	+8°096	65 1515	9°1	12	-9°156	+35°986			9	+0°366	+30°433		
12	-29°626	+53°235			11	-19°223	+3°909			9	-8°811	+26°666			13	+0°633	+56°923	64 1508	9°9
9	-29°534	+52°731			11	-19°180	+33°166			10	-8°801	+59°139			9	+0°748	+7°220		
	211					271					331					391			
11	-29°214	+61°532			12	-19°117	+2°643			11	-8°744	+14°664			9	+1°007	+58°535		
9	-29°089	+41°287			10	-19°048	+43°534			12	-8°596	+10°788			10	+1°261	+61°773		
16	-28°915	+18°323	65 1501	9°7	11	-18°966	+62°058			12	-8°282	+29°028			16	+1°619	+11°932	65 1536	9°5
11	-28°003	+32°369			12	-18°859	+2°612			9	-8°280	+23°547			14	+1°659	+20°641	65 1537	9°8
9	-27°785	+29°838			10	-18°605	+14°197			11	-8°242	+9°485			10	+1°742	+45°987		
10	-27°571	+56°381			10	-18°541	+59°316			14	-8°135	+13°527	65 1521	9°9	9	+1°761	+42°239		
16	-27°479	+45°158	65 1503	9°8	10	-18°360	+9°600			12	-7°844	+11°860			11	+1°987	+55°371		
9	-27°327	+30°101			9	-18°259	+62°386			9	-7°624	+5°971			9	+2°147	+16°988		
11	-27°124	+5°382			10	-18°004	+52°811			10	-7°621	+50°549			13	+2°483	+36°725		
10	-26°974	+28°908			16	-17°667	+30°708	65 1517	9°5	22	-7°527	+4°538	65 1522	9°3	9	+2°564	+3°438		
	221					281					341					401			
13	-26°941	+60°296			19	-17°664	+50°891	65 1518	9°4	12	-7°340	+62°935			13	+2°573	+24°124	65 1538	9°9
20	-26°850	+0°306	65 1502	9°5	10	-17°328	+15°884			11	-7°161	+46°540	65 1523	9°9	12	+3°129	+18°569		
9	-26°683	+14°514			9	-17°149	+58°638			10	-7°010	+31°400			26	+3°455	+58°411	64 1510	9°0
15	-26°596	+59°560			16	-17°094	+56°322	64 1491	9°6	12	-6°966	+46°117	65 1524	9°9	11	+3°819	+60°301		
52	-26°503	+36°911	65 1505	7°8	12	-16°953	+55°516			12	-6°903	+46°354	65 1525	9°9	15	+3°969	+61°631	64 1512	9°7
13	-26°490	+8°278	65 1504	9°9	13	-16°909	+62°144	64 1492	9°7	11	-6°796	+62°362			10	+4°003	+40°148		
9	-26°436	+56°550			9	-16°795	+64°624			9	-6°777	+21°789			15	+4°059	+38°533	65 1539	9°7
19	-26°341	+37°001			11	-16°767	+12°864			28	-6°364	+12°590	65 1527	9°2	11	+4°473	+64°652		
16	-26°152	+28°626	65 1506	9°6	11	-16°747	+10°365			11	-6°176	+10°590			11	+4°506	+23°803		
13	-25°859	+22°198			9	-16°700	+36°619			11	-6°138	+35°207			11	+4°638	+53°730		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,					531,					591,			
10	+ 4'652	+58'345			9	+15'463	+ 5'919			12	+25'133	+62'291			9	+35'753	+35'176		
12	+ 5'052	+14'717			12	+15'523	+ 1'957	65 1548	9'9	12	+25'237	+23'175			12	+36'407	+28'583		
18	+ 5'094	+45'117	65 1540	9'6	12	+15'617	+63'418			11	+25'475	+60'215			15	+36'430	+57'475	64 1567	9'6
15	+ 5'200	+57'677	64 1515	9'8	9	+15'913	+30'806			11	+25'825	+ 9'553			16	+36'531	+48'290	65 1574	9'6
10	+ 5'442	+21'846			15	+16'461	+32'972	65 1549	9'8	12	+25'908	+58'295			18	+36'644	+61'015	64 1565	9'6
12	+ 5'455	+31'646			11	+16'508	+50'738			14	+26'031	+35'370	65 1562	9'8	9	+36'892	+51'099		
10	+ 5'670	+23'439			15	+16'624	+61'017	64 1541	9'8	20	+26'402	+31'918	65 1563	9'5	9	+37'088	+59'652		
11	+ 5'935	+55'197			17	+16'689	+ 8'099	65 1550	9'5	14	+26'704	+ 6'615	65 1564	9'9	9	+37'193	+ 5'555		
16	+ 6'048	+55'815	64 1517	9'8	9	+16'893	+25'385			10	+26'828	+57'102			9	+37'238	+21'875		
17	+ 6'098	+57'585	64 1518	9'6	9	+17'174	+50'684			20	+26'866	+60'535	64 1552	9'4	10	+37'491	+13'726		
	421					481					541					601			
15	+ 6'169	+44'946	65 1541	9'8	12	+17'246	+ 1'435	65 1552	9'8	9	+27'220	+61'327			13	+37'630	+ 3'755		
9	+ 6'235	+46'181			13	+17'271	+ 5'862			11	+27'384	+56'425			11	+37'900	+20'434		
9	+ 6'290	+53'424			10	+17'318	+61'517			10	+27'416	+25'303			12	+38'101	+34'207		
12	+ 6'386	+59'041			14	+17'379	+ 8'433	65 1551	9'9	18	+27'508	+54'404	64 1553	9'6	10	+38'235	+37'450		
11	+ 6'905	+62'883			10	+17'446	+59'846			11	+27'514	+62'237			9	+38'451	+47'537		
10	+ 7'025	+23'969			9	+17'564	+35'584			12	+27'810	+60'543			12	+38'502	+29'191		
11	+ 7'239	+35'028			11	+17'584	+50'976			10	+27'934	+42'273			9	+38'782	+ 4'056		
9	+ 7'609	+44'049			9	+17'752	+21'541			9	+28'015	+24'529			9	+38'879	+38'930		
10	+ 7'616	+33'468			10	+17'980	+42'333			10	+28'047	+35'353			9	+38'913	+43'774		
11	+ 7'736	+42'254			9	+18'000	+58'447			21	+28'493	+23'859	65 1565	9'1	10	+39'006	+61'016		
	431					491					551					611			
18	+ 7'927	+37'835	65 1542	9'6	10	+18'011	+ 7'249			10	+28'601	+60'971			15	+39'105	+ 4'801	65 1575	9'9
9	+ 7'986	+56'515			16	+18'375	+17'754	65 1553	9'6	19	+28'623	+24'020			9	+39'238	+54'686		
9	+ 8'285	+36'828			14	+18'505	+11'654	65 1554	9'9	9	+28'909	+26'138			11	+39'272	+37'109		
9	+ 8'323	+38'754			11	+18'670	+23'849			28	+28'920	+ 5'131	65 1566	9'2	11	+39'319	+32'942		
16	+ 8'618	+11'133	65 1543	9'6	9	+18'685	+57'055			9	+29'085	+61'759			13	+39'456	+11'832		
12	+ 8'934	+ 9'329			9	+18'700	+36'026			10	+29'283	+23'987			11	+39'503	+ 9'589		
12	+ 8'961	+27'781	65 1544	9'9	16	+18'840	+30'516	65 1555	9'8	11	+29'447	+24'974			10	+39'702	+54'974		
10	+ 9'027	+58'787			12	+18'854	+18'180			11	+29'518	+56'298			14	+39'787	+ 1'020	65 1576	9'9
9	+ 9'151	+58'455			11	+19'020	+40'771			10	+29'560	+55'524			10	+39'866	+ 8'957		
12	+ 9'401	+47'357			9	+19'213	+51'121			9	+29'694	+51'179			10	+40'764	+53'283		
	441					501					561					621			
9	+ 9'520	+32'773			11	+19'315	+41'205			18	+30'072	+13'682	65 1568	9'6	9	+40'804	+ 6'543		
9	+ 9'632	+ 1'442			22	+19'324	+53'170	64 1545	9'2	11	+30'205	+45'726			9	+40'905	+28'251		
9	+ 9'762	+51'936			9	+19'433	+17'502			24	+30'321	+21'759	65 1569	9'2	9	+41'430	+38'328		
12	+10'091	+59'320			9	+19'474	+60'967			9	+30'442	+44'396			22	+41'686	+34'269	65 1577	9'2
11	+10'236	+ 5'601			16	+19'956	+15'390	65 1556	9'8	10	+30'500	+28'799			11	+41'802	+46'400		
11	+10'302	+ 4'002			10	+20'295	+43'027			12	+30'521	+42'519	65 1567	9'9	9	+41'975	+57'874		
9	+10'510	+56'074			10	+20'361	+ 4'098			9	+30'724	+ 2'671			9	+42'224	+ 2'951		
13	+11'125	+24'167	65 1545	9'8	10	+20'556	+59'263			9	+31'051	+36'439			15	+43'115	+54'982	64 1571	9'7
22	+11'377	+56'572	64 1526	9'1	10	+20'805	+30'676			11	+31'675	+17'272			9	+43'640	+ 5'919		
12	+11'386	+32'284			10	+20'927	+53'456			11	+32'126	+52'974			10	+43'742	+21'529		
	451					511					571					631			
10	+11'629	+53'624			11	+20'953	+ 1'164			9	+32'150	+62'727			10	+43'814	+40'314		
10	+11'786	+23'136			10	+21'614	+38'017			9	+32'413	+52'318			12	+44'159	+ 8'993		
13	+11'979	+51'449			12	+21'822	+40'686			10	+32'498	+24'603			12	+44'191	+45'920		
10	+12'225	+53'442			11	+21'845	+58'193			9	+32'653	+47'822			10	+44'731	+58'078		
9	+12'314	+43'852			14	+21'846	+10'272	65 1557	9'8	9	+32'802	+43'740			11	+44'841	+17'629		
13	+12'329	+57'582	64 1528	9'9	9	+21'870	+25'633			11	+33'040	+22'161			9	+45'230	+56'124		
10	+12'408	+46'231			11	+22'226	+35'241			16	+33'320	+33'474	65 1570	9'4	12	+45'262	+50'182	65 1578	9'9
9	+12'623	+18'624			10	+22'361	+63'119			16	+33'403	+15'883	65 1573	9'6	9	+45'272	+ 9'829		
11	+13'046	+54'455			19	+22'394	+39'111	65 1558	9'6	16	+33'529	+32'625	65 1571	9'8	9	+45'318	+41'069		
9	+13'366	+ 8'942			11	+22'533	+ 7'002			9	+33'578	+51'490			15	+45'764	+28'261	65 1579	9'9
	461					521					581					641			
12	+13'389	+54'722			12	+22'562	+27'320			13	+33'646	+ 0'064			11	+45'866	+52'915		
9	+13'429	+54'083			12	+22'878	+37'417			10	+33'646	+58'438			10	+45'984	+30'594		
10	+13'778	+38'722			13	+23'240	+56'343			20	+33'718	+31'560	65 1572	9'4	10	+46'659	+40'956		
12	+13'961	+44'210			10	+23'311	+24'739			12	+34'044	+ 0'828			11	+46'706	+20'262		
19	+13'965	+52'488	65 1547	9'4	14	+23'572	+ 2'649	65 1559	9'8	12	+34'327	+40'911			10	+47'235	+37'152		
11	+14'064	+38'968			14	+23'791	+ 9'819	65 1560	9'9	10	+34'364	+52'878			12	+47'330	+ 7'201		
9	+14'133	+20'220			12	+24'057	+47'741			9	+34'474	+26'065			9	+47'546	+56'096		
12	+14'418	+12'871			13	+24'703	+47'297	65 1561	9'8	11	+34'492	+28'087			11	+47'590	+20'313		
9	+14'732	+32'642			12	+24'711	+64'489			9	+35'558	+16'669			12	+47'623	+63'979	64 1576	9'9
16	+14'803	+54'642	64 1536	9'7	10	+25'103	+49'038			11	+35'589	+38'674			12	+47'688	+ 3'915		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651					711					771					831			
11	+47° 9' 68	+ 4° 437	64 1577	9° 9	10	-64° 8' 25	-20° 8' 53	66 1364	9° 0	11	-53° 3' 99	-44° 5' 53	65 1468	9° 8	10	-42° 3' 30	-17° 7' 76	66 1397	9° 6
10	+48° 2' 08	+ 9° 053			10	-64° 7' 82	-11° 2' 90			9	-53° 2' 72	- 7° 1' 85			20	-42° 2' 20	-46° 8' 77		
14	+48° 5' 58	+56° 0' 38			9	-64° 6' 92	-23° 6' 57			16	-53° 2' 48	- 4° 4' 00			40	-42° 21' 7	- 9° 4' 78		
10	+48° 9' 20	+ 8° 7' 65			32	-64° 6' 40	-28° 8' 28			9	-53° 2' 25	-25° 5' 39			20	-42° 1' 90	-48° 6' 41		
9	+48° 9' 24	+64° 7' 63			9	-64° 5' 38	- 5° 5' 65			10	-53° 1' 37	-10° 6' 16			12	-42° 0' 98	-10° 2' 64		
11	+49° 1' 99	+16° 5' 95	64 1583	9° 9	10	-64° 3' 88	-50° 7' 06	66 1362	9° 8	10	-53° 0' 89	-11° 7' 47	66 1379	9° 6	12	-41° 9' 69	- 9° 4' 57	66 1398	9° 5
12	+49° 2' 94	+49° 6' 63			9	-64° 3' 78	- 7° 5' 53			18	-52° 6' 63	-39° 1' 00			20	-41° 9' 01	-25° 5' 66		
11	+49° 4' 55	+53° 7' 46			13	-64° 1' 66	-56° 3' 25			10	-52° 5' 73	- 2° 9' 13			15	-41° 7' 12	-16° 1' 34		
13	+49° 9' 53	+57° 4' 32			32	-64° 1' 42	-34° 1' 73			13	-52° 5' 31	-35° 2' 91			10	-41° 5' 68	-17° 2' 00		
13	+50° 0' 29	+29° 0' 95			11	-63° 9' 48	-13° 3' 98			11	-52° 1' 69	-10° 4' 53			11	-41° 2' 57	- 4° 8' 51		
	661					721					781					841			
12	+50° 1' 67	+62° 6' 99	64 1582	9° 9	9	-63° 7' 45	- 2° 6' 50	66 1365	9° 6	11	-52° 1' 49	- 6° 1' 19	66 1380	9° 8	9	-41° 2' 38	-12° 9' 74	66 1401	9° 9
9	+50° 6' 42	+22° 0' 21			9	-63° 4' 12	-34° 4' 63			12	-52° 1' 41	-17° 9' 42			10	-41° 0' 76	-49° 6' 38		
11	+50° 6' 45	+49° 5' 72			16	-63° 4' 00	-55° 4' 68			10	-52° 0' 54	-32° 5' 65			13	-40° 8' 90	-55° 9' 08		
11	+52° 3' 24	+ 2° 1' 06			12	-63° 1' 32	-15° 8' 58			10	-51° 9' 58	-54° 7' 74			10	-40° 8' 20	-11° 7' 34		
10	+52° 8' 06	+29° 3' 67			9	-63° 1' 05	-44° 0' 08			11	-51° 7' 53	-29° 3' 00			14	-40° 5' 89	-24° 3' 73		
9	+53° 3' 85	+22° 7' 03	65 1585	9° 4	17	-63° 0' 70	-18° 6' 02	66 1369	9° 6	12	-51° 2' 02	- 6° 7' 28	66 1383	9° 6	9	-40° 5' 67	-24° 2' 05	66 1402	9° 0
10	+53° 4' 70	+43° 8' 76			10	-63° 0' 31	-31° 0' 89			12	-51° 0' 11	-59° 0' 71			10	-40° 5' 57	-37° 8' 16		
10	+53° 6' 46	+40° 2' 81			12	-62° 9' 63	-45° 1' 20			10	-50° 9' 41	-11° 3' 45			12	-40° 5' 09	-41° 7' 71		
12	+54° 6' 21	+28° 0' 81			9	-62° 6' 57	-34° 1' 79			9	-50° 8' 20	-61° 1' 05			14	-40° 3' 50	-60° 1' 01		
12	+54° 6' 77	+ 0° 6' 01			9	-62° 3' 51	-19° 4' 90			13	-50° 6' 31	-41° 7' 14			11	-40° 1' 89	-37° 1' 96		
11	+54° 8' 69	+54° 1' 42	65 1588	9° 8	9	-62° 1' 78	-13° 6' 40	66 1368	9° 9	10	-50° 5' 39	-18° 8' 86	66 1382	9° 8	9	-39° 7' 38	-20° 1' 73	66 1404	9° 2
10	+54° 9' 05	+ 5° 1' 54			9	-62° 1' 01	-51° 5' 56			17	-50° 4' 86	-15° 8' 00			9	-39° 4' 04	-53° 4' 88		
9	+54° 9' 20	+ 7° 1' 28			13	-62° 0' 30	-55° 5' 49			16	-50° 4' 64	-37° 7' 52			11	-38° 9' 53	-61° 9' 77		
11	+55° 1' 99	+22° 9' 55			9	-61° 9' 09	-47° 8' 96			12	-50° 2' 36	-61° 8' 79			30	-38° 8' 70	-13° 3' 10		
20	+55° 2' 99	+38° 1' 36			12	-61° 8' 61	-26° 1' 06			11	-50° 1' 35	-21° 5' 35			11	-38° 8' 14	-44° 9' 59		
14	+55° 4' 63	+17° 2' 29	65 1587	9° 0	11	-61° 8' 08	-17° 4' 37	66 1372	9° 8	12	-49° 6' 49	- 6° 7' 77	66 1384	9° 4	9	-38° 5' 00	-15° 7' 04	66 1405	9° 9
36	+55° 5' 98	+29° 7' 80			12	-61° 7' 72	-38° 3' 14			10	-49° 5' 49	-22° 0' 37			9	-37° 2' 52	- 6° 0' 20		
44	+55° 8' 54	+46° 3' 75			10	-61° 5' 14	-12° 2' 93			11	-49° 4' 30	-14° 5' 90			13	-36° 9' 24	-40° 7' 97		
9	+55° 9' 26	+40° 6' 07			12	-61° 2' 63	-10° 4' 05			10	-49° 3' 98	-37° 5' 07			9	-36° 8' 82	- 5° 4' 77		
9	+56° 2' 33	+54° 1' 58			10	-61° 1' 77	-17° 6' 50			9	-49° 1' 31	- 1° 1' 19			9	-36° 8' 00	- 5° 3' 46		
	681					741					801					861			
22	+56° 4' 81	+54° 4' 72	64 1591	9° 2	15	-60° 9' 05	- 0° 8' 35	65 1461	9° 7	22	-48° 8' 50	-59° 7' 91	66 1386	9° 2	11	-36° 7' 13	-51° 6' 99	66 1408	9° 8
9	+56° 7' 26	+51° 5' 78			12	-60° 0' 15	- 2° 9' 94			10	-48° 6' 93	-32° 8' 81			9	-35° 9' 75	-60° 4' 24		
9	+57° 4' 53	+15° 7' 06			12	-59° 8' 76	-61° 9' 15			30	-48° 4' 09	-47° 0' 89			10	-35° 9' 37	-14° 4' 62		
36	+57° 7' 15	+40° 6' 51			12	-59° 7' 10	-15° 3' 08			9	-48° 3' 54	-19° 3' 32			24	-35° 5' 74	-31° 0' 69		
9	+57° 8' 94	+28° 1' 01			9	-59° 5' 74	- 1° 6' 46			38	-48° 2' 74	-58° 7' 13			11	-35° 0' 16	-22° 2' 41		
9	+57° 9' 50	+39° 3' 40	65 1589	8° 8	9	-59° 2' 69	-10° 5' 28	66 1373	9° 4	10	-48° 2' 21	-49° 3' 83	66 1385	9° 0	14	-34° 8' 56	-23° 7' 54	66 1409	9° 9
11	+58° 3' 76	+ 8° 7' 40			9	-59° 2' 30	-19° 5' 76			12	-48° 0' 05	-57° 5' 79			14	-34° 5' 24	-21° 7' 48		
10	+58° 4' 77	+ 7° 7' 19			13	-59° 1' 80	-54° 9' 36			9	-47° 3' 08	- 9° 8' 33			22	-34° 3' 15	-25° 3' 70		
12	+58° 5' 93	+ 9° 7' 74			9	-58° 9' 84	- 1° 8' 06			11	-47° 2' 99	-38° 1' 85			9	-34° 1' 28	-39° 9' 51		
10	+58° 7' 54	+63° 9' 02			9	-58° 7' 62	-19° 0' 30			9	-47° 0' 93	-52° 9' 81			11	-34° 0' 64	- 1° 3' 90		
	691					751					811					871			
10	+58° 9' 80	+29° 9' 41	64 1599	9° 9	9	-58° 2' 58	- 6° 9' 41	66 1375	9° 8	15	-47° 0' 08	-34° 6' 19	66 1388	9° 8	9	-33° 6' 62	-21° 5' 66	66 1410	9° 6
12	+59° 4' 04	+34° 5' 42			20	-58° 2' 32	-54° 5' 79			20	-46° 7' 28	-58° 0' 63			16	-33° 5' 57	-50° 2' 61		
10	+59° 4' 38	+58° 6' 98			13	-58° 2' 13	- 7° 8' 07			14	-46° 2' 51	-37° 4' 82			9	-33° 4' 14	-26° 6' 14		
11	+60° 4' 59	+52° 3' 82			15	-57° 4' 18	-22° 5' 59			9	-46° 2' 17	-60° 0' 63			9	-32° 7' 30	-55° 5' 35		
9	+60° 8' 17	+27° 9' 05			10	-57° 2' 97	-56° 3' 56			9	-46° 0' 60	-15° 8' 06			10	-32° 7' 05	-10° 9' 29		
9	+60° 9' 39	+17° 1' 20	65 1592	9° 6	12	-57° 1' 21	- 1° 6' 56	66 1374	9° 8	9	-45° 6' 36	-15° 4' 80	66 1394	9° 8	12	-32° 0' 52	-29° 9' 10	66 1412	9° 0
11	+61° 9' 91	+ 7° 0' 05			14	-56° 7' 86	-45° 8' 28			10	-45° 3' 91	- 1° 8' 87			9	-31° 6' 66	-58° 5' 03		
18	+62° 2' 64	+15° 1' 54			9	-56° 5' 62	- 4° 5' 38			12	-45° 3' 62	- 9° 4' 78			10	-31° 6' 64	-38° 7' 01		
9	+62° 3' 33	+16° 6' 86			10	-56° 5' 26	-45° 6' 65			10	-45° 3' 33	- 2° 2' 77			12	-31° 6' 38	- 7° 1' 30		
9	+62° 5' 83	+40° 2' 51			11	-56° 1' 19	-43° 4' 07			9	-45° 1' 88	- 6° 0' 39			10	-31° 0' 88	-11° 9' 18		
	701					761					821					881			
14	+62° 5' 97	+44° 8' 54	65 1591	9° 6	9	-56° 0' 50	- 3° 2' 94	66 1376	9° 9	9	-44° 3' 61	-51° 0' 48	66 1389	9° 8	11	-31° 0' 83	-61° 6' 23	66 1414	9° 6
11	+62° 6' 96	+16° 1' 68			12	-55° 8' 34	-18° 3' 54			9	-44° 1' 72	- 7° 9' 37			10	-30° 9' 44	-38° 2' 15		
12	+63° 2' 02	+18° 7' 10			19	-55° 8' 07	-19° 6' 49			11	-44° 1' 66	-29° 0' 44			11	-30° 8' 18	-32° 5' 95		
11	+63° 3' 24	+ 2° 5' 18			11	-55° 3' 54	- 7° 3' 28			10	-44° 1' 38	-45° 6' 39			13	-30° 7' 43	-50° 6' 97		
56	+63° 5' 06	+30° 5' 94			9	-55° 2' 64	-18° 5' 80			18	-43° 3' 27	-25° 7' 35			16	-30° 4' 93	-10° 7' 68		
9	+63° 6' 43	+ 0° 4' 37	64 1603	9° 6	10	-54° 4' 57	-22° 9' 77	66 1393	9° 8	15	-43° 2' 38	-31° 4' 79	66 1395	9° 2	9	-30° 2' 14	-24° 1' 31	66 1416	9° 0
14	+64° 2' 22	+53° 0' 31			9	-54° 3' 08	- 4° 1' 85			12	-43° 1' 51	- 6° 2' 70			9	-30° 1' 33	-12° 2' 58		
9	+64° 5' 05	+10° 9' 67			9	-54° 3' 01	-37° 1' 30			26	-43° 0' 64	-19° 7' 98			10	-29° 7' 72	-25° 1' 80		
42	+64° 7' 14	+56° 9' 23			9	-54° 1' 57	-22° 1' 81			16	-42° 8' 49	-52° 3' 59			34	-29° 3' 88	-17° 9' 73		
10	+64° 9' 13	+ 6° 4' 39			9	-54° 1' 22	-53° 5' 09			211	-42° 4' 13	-34° 6' 91			14	-29° 2' 26	-34° 1' 19		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	891,					951,					1011,					1071,			
11	-29° 137	-57° 427			13	-15° 249	-31° 662			18	-3° 843	-25° 697	66 1430	9·6	9	+5° 829	-50° 495		
9	-28° 794	-62° 288			11	-14° 731	-2° 033			12	-3° 520	-38° 485			9	+5° 990	-54° 373		
9	-28° 445	-23° 783			11	-14° 715	-21° 130			9	-3° 389	-30° 360			9	+6° 598	-37° 123		
10	-28° 420	-47° 925			9	-14° 187	-35° 743			11	-3° 080	-32° 837			11	+6° 694	-20° 337		
11	-28° 055	-56° 946			11	-13° 875	-56° 033			18	-2° 780	-43° 966	66 1431	9·6	12	+6° 757	-31° 516		
10	-27° 601	-18° 560			10	-13° 699	-9° 204			15	-2° 544	-55° 374	66 1432	9·7	13	+7° 011	-40° 478		
13	-27° 480	-15° 109	66 1413	9·8	9	-13° 553	-22° 526			13	-2° 540	-41° 828			14	+7° 069	-39° 661		
10	-27° 461	-39° 931			10	-13° 539	-36° 891			10	-2° 341	-0° 353			10	+7° 187	-60° 233		
9	-27° 291	-5° 873			11	-13° 462	-26° 599			16	-2° 328	-63° 298	66 1433	9·7	10	+7° 299	-50° 687		
18	-26° 564	-26° 047	66 1414	9·6	11	-13° 242	-28° 597			11	-1° 991	-31° 374			30	+7° 407	-60° 023	66 1447	9·2
	901					981					1021					1081			
9	-26° 362	-10° 731			22	-13° 174	-22° 700	66 1426	9·4	15	-1° 986	-43° 924			16	+7° 502	-52° 029		
9	-26° 355	-10° 488			10	-13° 101	-60° 450			11	-1° 652	-58° 767			20	+7° 629	-40° 670	66 1448	9·5
9	-25° 630	-6° 263			9	-12° 613	-27° 825			12	-1° 500	-42° 286			10	+7° 738	-53° 927		
10	-25° 560	-12° 952			13	-12° 514	-43° 330			15	-1° 405	-31° 231	66 1435	9·8	11	+7° 743	-28° 498		
13	-25° 243	-32° 301			10	-12° 143	-33° 473			60	-1° 321	-17° 179	66 1434	8·0	12	+7° 833	-44° 336		
11	-25° 031	-39° 569			9	-12° 135	-48° 748			15	-1° 181	-58° 015			10	+7° 850	-55° 677		
9	-24° 849	-17° 606			12	-12° 077	-39° 647			16	-1° 163	-18° 479	66 1436	9·5	15	+7° 992	-14° 450	66 1449	9·8
11	-24° 801	-57° 841			12	-11° 850	-28° 594			9	-1° 080	-7° 548			10	+8° 243	-18° 804		
10	-24° 739	-38° 215			11	-11° 629	-7° 310			9	-0° 785	-33° 738			12	+8° 396	-19° 707		
15	-24° 657	-21° 192	66 1415	9·8	9	-11° 611	-13° 375			16	-0° 761	-29° 750	66 1437	9·6	22	+8° 741	-27° 258	66 1450	9·4
	911					971					1031					1091			
11	-24° 606	-42° 082			11	-11° 509	-2° 912			14	-0° 612	-59° 121			9	+8° 792	-19° 696		
12	-24° 606	-20° 228	66 1416	9·9	11	-11° 310	-15° 331			9	-0° 553	-42° 342			10	+8° 808	-39° 282		
18	-24° 461	-23° 438	66 1417	9·6	13	-11° 198	-51° 315			19	-0° 513	-47° 348	66 1438	9·8	9	+8° 855	-29° 084		
9	-24° 348	-12° 491			20	-11° 195	-61° 808	66 1427	9·5	12	-0° 065	-29° 398			13	+9° 076	-42° 142		
11	-24° 303	-15° 787	66 1418	9·9	10	-11° 001	-19° 557			9	+0° 256	-41° 932			9	+9° 079	-15° 846		
11	-24° 224	-15° 713			12	-10° 960	-59° 852			9	+0° 546	-17° 185			13	+9° 164	-26° 627		
24	-24° 146	-1° 242	65 1509	9·2	10	-10° 836	-11° 667			11	+0° 697	-32° 375			9	+9° 411	-46° 673		
10	-23° 864	-47° 914			12	-10° 714	-51° 350			12	+1° 160	-38° 965			9	+9° 680	-23° 441		
14	-23° 185	-60° 456			9	-10° 697	-4° 894			12	+1° 356	-11° 862	66 1439	9·9	11	+9° 687	-58° 175		
9	-22° 577	-28° 755			10	-10° 024	-48° 084			9	+1° 386	-26° 862			11	+9° 876	-32° 711		
	921					981					1041					1101			
11	-22° 557	-1° 283			10	-9° 086	-52° 432			9	+1° 459	-28° 159			12	+9° 914	-57° 611		
14	-22° 333	-4° 356	65 1511	9·7	11	-8° 876	-47° 769			14	+1° 728	-13° 344	66 1440	9·8	12	+10° 064	-24° 301		
12	-22° 249	-9° 706			18	-8° 747	-28° 560	66 1428	9·7	10	+1° 898	-15° 380			11	+10° 105	-4° 089		
12	-22° 206	-28° 881			11	-8° 337	-53° 793			19	+2° 004	-19° 639	66 1441	9·5	9	+10° 108	-18° 848		
10	-21° 638	-63° 308			9	-8° 209	-36° 895			15	+2° 013	-62° 247	66 1443	9·9	11	+10° 218	-19° 884		
13	-20° 115	-11° 953	66 1419	9·9	9	-7° 727	-1° 332			16	+2° 105	-29° 088	66 1442	9·8	18	+10° 332	-39° 954	66 1451	9·6
11	-19° 755	-11° 575			9	-7° 670	-17° 123			12	+2° 141	-34° 363			11	+10° 340	-15° 104		
10	-19° 421	-64° 845			9	-7° 550	-20° 553			9	+2° 664	-34° 585			16	+10° 349	-63° 567	66 1452	9·8
9	-19° 167	-24° 433			9	-7° 402	-33° 119			11	+2° 971	-20° 892			13	+10° 754	-54° 978		
12	-19° 149	-7° 507			9	-7° 329	-38° 615			13	+3° 137	-43° 891			15	+11° 277	-39° 090		
	931					991					1051					1111			
12	-19° 084	-4° 233			9	-7° 319	-40° 422			10	+3° 389	-49° 672			12	+11° 308	-34° 501		
16	-18° 886	-14° 764	66 1420	9·6	9	-7° 130	-8° 374			11	+3° 465	-54° 545			12	+11° 319	-0° 395	65 1546	9·9
10	-18° 817	-42° 170			9	-6° 873	-1° 103			9	+3° 540	-36° 261			11	+11° 484	-10° 737		
9	-18° 658	-15° 553			14	-6° 803	-58° 647			10	+3° 558	-56° 431			22	+11° 496	-57° 209	66 1453	9·6
20	-18° 499	-46° 222	66 1421	9·6	9	-6° 624	-54° 145			10	+3° 577	-61° 099			10	+11° 520	-49° 853		
17	-18° 447	-39° 703	66 1422	9·7	9	-6° 567	-41° 992			24	+3° 713	-56° 455	66 1444	9·3	9	+12° 005	-64° 389		
12	-18° 275	-1° 108	65 1516	9·9	11	-6° 514	-27° 484			12	+3° 746	-44° 572			10	+12° 063	-40° 995		
12	-17° 855	-22° 501			12	-6° 430	-0° 222	65 1526	9·8	9	+3° 788	-43° 604			9	+12° 173	-44° 949		
9	-17° 239	-40° 116			9	-6° 010	-49° 644			9	+4° 158	-39° 116			9	+12° 319	-6° 677		
10	-17° 152	-1° 655			18	-6° 004	-13° 192	66 1429	9·5	9	+4° 339	-26° 701			15	+12° 907	-63° 275	66 1454	9·9
	941					1001					1061					1121			
10	-17° 145	-63° 724			9	-5° 793	-41° 878			9	+4° 468	-54° 992			36	+13° 752	-17° 340	66 1455	9·1
10	-16° 663	-32° 604			10	-5° 764	-61° 919			16	+4° 665	-53° 779			13	+13° 986	-60° 499		
50	-16° 639	-47° 123	66 1423	8·2	11	-5° 689	-15° 052			10	+4° 741	-16° 407			16	+14° 005	-34° 791	66 1456	9·9
11	-16° 566	-17° 341			9	-5° 468	-60° 438			12	+4° 874	-57° 563			11	+14° 015	-47° 629		
10	-16° 107	-27° 804			10	-5° 298	-17° 746			13	+5° 196	-10° 956	66 1446	9·8	10	+14° 103	-25° 396		
11	-15° 829	-33° 198			10	-4° 936	-47° 892			11	+5° 426	-23° 758			12	+14° 105	-33° 891		
10	-15° 524	-62° 534			9	-4° 710	-57° 007			10	+5° 540	-1° 125			9	+14° 143	-6° 645		
22	-15° 468	-37° 055	66 1425	9·5	12	-4° 377	-53° 245			9	+5° 710	-55° 751			12	+14° 316	-36° 134		
42	-15° 371	-63° 400	66 1424	8·9	9	-4° 321	-47° 119			11	+5° 706	-13° 537			11	+14° 327	-5° 197		
12	-15° 308	-45° 046			9	-4° 012	-56° 042			14	+5° 759	-41° 172			9	+14° 469	-29° 485		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1131					1191					1251					1311			
9	+14° 626	-43° 200			10	+22° 805	-50° 622			22	+32° 941	-9° 495	66 1474	9° 2	10	+42° 457	-47° 499		
14	+14° 951	-62° 115	66 1458	9° 8	19	+23° 137	-39° 318	66 1467	9° 6	20	+33° 066	-44° 172	66 1475	9° 6	16	+42° 507	-55° 981	66 1482	9° 8
11	+14° 971	-9° 131			11	+23° 484	-53° 027			10	+33° 129	-25° 267			12	+42° 588	-41° 538		
11	+14° 981	-38° 561			10	+23° 485	-22° 965			10	+33° 180	-54° 095			10	+42° 758	-7° 869		
21	+15° 102	-49° 937	66 1457	9° 4	9	+23° 602	-49° 464			11	+33° 565	-50° 383			9	+42° 763	-55° 936		
11	+15° 303	-14° 812			9	+24° 021	-48° 799			12	+33° 681	-3° 343			10	+43° 328	-53° 626		
16	+15° 462	-47° 111	66 1459	9° 6	16	+24° 044	-46° 115	66 1468	9° 9	11	+33° 888	-25° 083			9	+43° 472	-7° 676		
12	+15° 710	-61° 884			10	+24° 104	-53° 185			13	+34° 063	-33° 223			9	+43° 506	-48° 000		
9	+15° 792	-31° 753			10	+24° 278	-51° 919			9	+34° 076	-47° 477			10	+43° 598	-1° 095		
16	+15° 863	-39° 248	66 1460	9° 8	9	+24° 622	-45° 257			11	+34° 258	-37° 258			13	+43° 725	-31° 126	66 1484	9° 9
	1141					1201					1261					1321			
11	+15° 884	-36° 378			11	+25° 001	-43° 278			12	+34° 595	-2° 591			11	+43° 749	-30° 501		
9	+15° 997	-35° 191			11	+25° 886	-4° 304			13	+34° 650	-37° 413			12	+43° 873	-12° 294		
36	+16° 030	-45° 690	66 1461	8° 9	12	+25° 937	-29° 580			11	+34° 805	-48° 375			9	+44° 218	-52° 128		
10	+16° 087	-28° 084			9	+26° 203	-57° 572			12	+35° 018	-9° 843			15	+44° 305	-12° 697	66 1485	9° 8
9	+16° 135	-5° 521			11	+26° 218	-19° 686			9	+35° 274	-1° 959			12	+44° 444	-54° 008		
11	+16° 176	-43° 683			9	+26° 611	-60° 388			9	+35° 433	-13° 891			10	+44° 580	-2° 393		
10	+16° 271	-63° 992			9	+26° 737	-30° 471			10	+35° 756	-53° 994			10	+44° 603	-14° 396		
10	+16° 434	-0° 929			10	+26° 940	-54° 063			9	+35° 847	-16° 282			9	+44° 868	-47° 534		
9	+16° 435	-4° 530			10	+27° 201	-44° 908			11	+35° 973	-6° 923			20	+45° 058	-31° 833	66 1486	9° 4
9	+16° 506	-35° 260			11	+27° 222	-11° 526			10	+36° 063	-19° 460			10	+45° 058	-29° 190		
	1151					1211					1271					1331			
9	+16° 521	-15° 876			9	+27° 415	-26° 948			10	+36° 159	-16° 928			9	+45° 164	-3° 857		
12	+16° 587	-52° 529			12	+27° 633	-44° 139			9	+36° 477	-59° 213			9	+45° 372	-31° 941		
16	+16° 912	-41° 893	66 1462	9° 9	12	+27° 779	-22° 768			11	+36° 601	-40° 776			18	+45° 508	-57° 519	66 1487	9° 6
9	+16° 916	-48° 223			10	+27° 820	-8° 833			9	+36° 632	-2° 964			10	+45° 539	-16° 516		
20	+17° 446	-63° 700	66 1463	9° 6	18	+28° 116	-59° 706	66 1470	9° 6	11	+36° 746	-37° 723			12	+45° 718	-25° 500		
13	+17° 543	-29° 834			11	+28° 314	-33° 653			11	+36° 812	-28° 499	66 1477	9° 6	9	+46° 048	-22° 963		
10	+17° 549	-30° 773			9	+28° 498	-50° 535			18	+37° 151	-20° 349			11	+46° 092	-29° 619		
11	+17° 816	-17° 024			12	+28° 775	-64° 034			9	+37° 203	-33° 299			12	+46° 153	-46° 286	66 1488	9° 8
9	+17° 992	-26° 764			9	+28° 846	-5° 141			10	+37° 585	-42° 558			11	+46° 562	-29° 959		
11	+18° 010	-12° 626			11	+28° 936	-45° 746			10	+37° 619	-59° 545			26	+46° 933	-7° 852	65 1580	9° 1
	1161					1221					1281					1341			
12	+18° 068	-41° 507			13	+28° 947	-12° 472			10	+37° 711	-28° 292			12	+46° 978	-42° 322		
9	+18° 071	-34° 335			14	+29° 031	-63° 345	66 1472	9° 7	12	+37° 774	-47° 352			10	+47° 149	-46° 177		
9	+18° 275	-17° 734			10	+29° 037	-35° 323			11	+38° 262	-35° 727			10	+47° 392	-11° 436		
13	+18° 297	-17° 149			10	+29° 226	-47° 563			10	+38° 287	-36° 683			9	+47° 429	-0° 667		
10	+18° 454	-57° 332			9	+29° 326	-19° 086			9	+38° 307	-14° 874			9	+48° 230	-35° 606		
9	+18° 588	-48° 523			20	+29° 560	-15° 414	66 1471	9° 3	10	+38° 378	-36° 889			18	+49° 105	-8° 458	65 1582	9° 6
11	+18° 653	-19° 592			11	+29° 612	-46° 601			9	+38° 449	-57° 789			9	+49° 254	-19° 515		
11	+19° 058	-18° 814			12	+29° 919	-21° 050			11	+38° 517	-0° 961			9	+49° 514	-52° 930		
9	+19° 278	-54° 038			9	+30° 342	-24° 539			10	+38° 536	-36° 680			12	+49° 747	-1° 021		
10	+19° 440	-45° 962			9	+30° 617	-7° 153			11	+38° 552	-49° 874			13	+49° 804	-20° 162	66 1489	9° 8
	1171					1231					1291					1351			
10	+20° 025	-44° 050			14	+30° 721	-15° 166			9	+38° 554	-29° 346			9	+49° 835	-52° 214		
12	+20° 417	-2° 718			11	+30° 724	-13° 134			13	+38° 675	-26° 577			13	+49° 851	-5° 991		
9	+20° 460	-44° 940			12	+30° 779	-28° 762			13	+38° 994	-42° 654			9	+50° 204	-10° 475		
10	+20° 648	-30° 838			13	+30° 962	-17° 227			10	+39° 356	-21° 999			15	+50° 264	-3° 781	65 1583	9° 9
9	+20° 659	-53° 533			9	+30° 963	-49° 250			11	+39° 704	-49° 116			16	+50° 624	-26° 936	66 1491	9° 8
10	+20° 774	-0° 292			11	+31° 067	-7° 581			13	+39° 776	-26° 927			12	+50° 698	-53° 123		
9	+20° 862	-50° 681			13	+31° 158	-36° 499			12	+39° 919	-53° 764			10	+50° 800	-50° 575		
11	+20° 877	-19° 000			12	+31° 229	-33° 128			14	+39° 930	-46° 780	66 1478	9° 8	9	+51° 464	-34° 769		
11	+21° 091	-30° 374			12	+31° 263	-11° 406			9	+40° 178	-2° 575			13	+51° 809	-57° 318		
9	+21° 176	-32° 212			10	+31° 445	-30° 569			9	+40° 498	-3° 260			10	+51° 900	-10° 555		
	1181					1241					1301					1361			
9	+21° 222	-48° 748			11	+31° 732	-55° 485			11	+40° 648	-61° 370			11	+52° 086	-12° 173		
14	+21° 265	-38° 574	66 1465	9° 9	22	+31° 753	-45° 559	66 1473	9° 4	12	+40° 873	-11° 373			11	+52° 132	-52° 051		
20	+21° 465	-9° 295	66 1464	9° 4	9	+31° 861	-5° 071			10	+40° 950	-4° 927			9	+52° 232	-44° 590		
9	+21° 502	-50° 731			11	+31° 964	-19° 167			20	+41° 049	-24° 891	66 1479	9° 3	13	+52° 387	-22° 773		
11	+22° 100	-8° 337			12	+32° 015	-1° 672			16	+41° 508	-48° 468	66 1481	9° 7	13	+52° 409	-2° 907		
14	+22° 189	-64° 941	66 1466	9° 8	10	+32° 123	-52° 821			12	+41° 554	-52° 066			12	+52° 460	-20° 066		
11	+22° 239	-15° 462			11	+32° 247	-13° 977			19	+42° 041	-24° 304	66 1480	9° 6	34	+52° 566	-2° 139	65 1584	8° 9
9	+22° 385	-16° 276			9	+32° 516	-21° 012			9	+42° 199	-18° 184			19	+52° 577	-56° 712	66 1492	9° 5
9	+22° 466	-57° 049			16	+32° 860	-63° 313	66 1476	9° 6	36	+42° 367	-63° 333	66 1483	9° 2	9	+52° 651	-11° 923		
9	+22° 804	-28° 239			11	+32° 873	-47° 219			9	+42° 369	-19° 512			9	+52° 661	-23° 604		

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
	1371					1431				PLATE CENTRE. 11 ^h 6 ^m , - 66°. Plate 4076. 1917, Apr. 17. PROVISIONAL CONSTANTS. $a = - \cdot 01137$ $d = - \cdot 00017$ $b = + \cdot 00013$ $e = - \cdot 01140$ $c = + \cdot 0687$ $f = - \cdot 1009$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$						51			
12	+52° 8'74	-12° 1'05			12	+62° 7'93	-33° 1'23			9	-44° 8'62	+40° 5'81							
9	+53° 4'89	-45° 9'75			9	+63° 1'03	-62° 7'30			13	-44° 8'47	+0° 6'25	65	1596	9° 9				
9	+53° 7'82	-25° 5'67			9	+63° 1'11	-54° 1'71			12	-44° 7'51	+0° 8'63							
14	+53° 8'32	-28° 7'24	66	1493	9° 9	10	+64° 5'53	-15° 8'45			12	-44° 6'96	+17° 6'55						
13	+53° 8'38	-57° 6'37			30	+64° 7'28	-47° 2'74	66	1506	9° 2	10	-44° 4'94	+1° 6'91						
12	+54° 4'43	-23° 2'14			14	+64° 7'90	-28° 3'16			9	-44° 4'40	+39° 5'65							
10	+54° 7'82	-14° 7'73			11	+64° 7'97	-19° 1'03			19	-44° 4'23	+49° 6'68	65	1600	9° 3				
14	+54° 8'98	-15° 3'41	66	1494	9° 9	16	+64° 9'97	-4° 2'90	65	1595	9° 5	26	-44° 1'06	+21° 0'43	65	1599	8° 8		
14	+54° 9'62	-36° 9'13								20	-44° 0'56	+15° 8'61	65	1598	9° 2				
9	+54° 9'72	-27° 2'12								13	-44° 0'22	+10° 2'01	65	1597	9° 9				
10	+55° 3'11	-27° 8'10																	
9	+55° 3'76	-20° 0'50								11	-64° 4'00	+6° 6'75							
11	+55° 3'81	-5° 3'85								9	-64° 2'01	+49° 1'51							
15	+55° 4'57	-50° 9'91	66	1497	9° 8					11	-63° 8'11	+3° 4'16							
14	+55° 7'73	-63° 1'05	66	1499	9° 6					9	-63° 6'62	+8° 5'85							
9	+55° 9'00	-12° 4'21								10	-63° 5'75	+3° 9'68							
12	+55° 9'32	-28° 3'35								12	-63° 3'24	+28° 6'99	65	1581	9° 9	9	-41° 1'78	+16° 1'32	
10	+55° 9'93	-26° 9'38								9	-63° 2'26	+16° 1'79							
9	+56° 0'04	-3° 6'18								9	-62° 9'36	+8° 3'41							
19	+56° 0'80	-20° 9'20	66	1495	9° 4					9	-60° 9'85	+43° 6'84							
	1391									9	-60° 3'23	+54° 0'29							
15	+56° 2'47	-61° 1'28	66	1500	9° 6					10	-59° 0'58	+1° 9'52							
11	+56° 2'87	-6° 9'77								36	-58° 7'88	+46° 8'64	65	1586	8° 5	9	-39° 1'06	+22° 1'83	
9	+56° 3'03	-55° 8'41								19	-58° 7'35	+54° 4'83	64	1591	9° 2	13	-38° 9'89	+8° 0'53	
20	+56° 5'30	-38° 7'62	66	1498	9° 6					20	-58° 7'33	+38° 1'03	65	1585	9° 4	12	-38° 8'28	+29° 5'58	
9	+56° 6'88	-2° 0'51								11	-58° 6'69	+28° 0'26				9	-38° 6'69	+19° 5'81	
11	+56° 7'19	-52° 2'92								34	-57° 8'09	+29° 7'92	65	1587	9° 0	9	-38° 5'66	+19° 1'34	
9	+56° 7'71	-13° 5'95								11	-57° 7'20	+22° 9'55				9	-37° 8'58	+0° 5'11	
9	+56° 8'41	-57° 2'74								9	-57° 1'72	+64° 0'45				11	-37° 7'24	+9° 0'28	
13	+56° 8'44	-9° 7'45	66	1496	9° 9					14	-57° 0'31	+17° 2'56	65	1588	9° 8	9	-37° 5'99	+2° 3'62	
11	+57° 2'17	-34° 4'02								10	-56° 6'96	+5° 1'85				12	-37° 2'10	+14° 4'84	
	1401																		
9	+57° 2'54	-21° 5'46								12	-56° 5'96	+0° 6'23				24	-36° 7'75	+0° 0'64	65
9	+57° 3'44	-12° 0'69								35	-56° 5'23	+40° 7'98	65	1589	8° 8	9	-35° 5'83	+47° 2'86	1605
13	+57° 5'24	-42° 7'03								10	-56° 1'20	+58° 9'17				9	-35° 5'69	+38° 9'91	9° 2
11	+57° 5'77	-19° 4'25								11	-54° 6'43	+52° 6'49	64	1599	9° 9	9	-35° 1'42	+30° 9'61	
15	+58° 6'13	-2° 8'29	65	1590	9° 9					9	-54° 4'51	+30° 1'82				24	-35° 1'17	+57° 9'51	9° 0
13	+58° 6'28	-58° 0'15								12	-54° 3'71	+34° 8'24				11	-35° 1'17	+57° 9'51	
12	+58° 6'74	-38° 0'53								10	-53° 5'07	+9° 0'13				14	-34° 8'57	+49° 3'41	65
9	+58° 8'22	-15° 2'33								12	-53° 3'80	+10° 0'44				12	-34° 7'67	+17° 4'02	1607
9	+58° 9'28	-47° 0'34								9	-53° 3'19	+8° 0'07				14	-34° 2'38	+23° 9'47	9° 8
11	+59° 5'05	-31° 0'20								9	-52° 4'89	+28° 2'98				15	-34° 1'31	+28° 4'44	65
	1411															14	-34° 0'02	+10° 0'60	1610
11	+59° 5'15	-10° 2'69								13	-51° 9'60	+45° 3'37	65	1591	9° 6				9° 7
11	+59° 7'44	-41° 7'25								16	-50° 9'31	+53° 6'07	64	1603	9° 6				9° 7
10	+59° 9'36	-35° 0'73								36	-50° 7'45	+57° 5'41	64	1604	8° 8				9° 4
15	+60° 2'63	-34° 7'11								18	-50° 1'10	+15° 6'93	65	1592	9° 6				
24	+60° 4'22	-43° 6'59	66	1503	9° 2					22	-50° 0'31	+60° 3'87	64	1606	9° 2				
9	+60° 4'32	-24° 1'20								39	-49° 9'96	+31° 1'87	65	1593	8° 0				
15	+60° 9'77	-10° 4'12	66	1502	9° 7					11	-49° 7'84	+7° 5'49				10	-31° 7'71	+1° 0'88	
10	+60° 9'95	-62° 5'41								10	-49° 7'45	+16° 7'39				10	-31° 6'73	+38° 0'13	
10	+61° 2'96	-27° 4'89								10	-49° 7'45	+16° 7'39				11	-31° 6'57	+0° 7'03	
14	+61° 5'55	-13° 0'19								11	-49° 4'96	+64° 5'58	64	1607	9° 9	14	-30° 9'61	+22° 9'58	65
	1421									12	-49° 4'17	+19° 3'15				20	-30° 5'54	+17° 6'69	1612
9	+61° 6'09	-55° 4'06																	9° 7
12	+61° 6'95	-39° 6'12								11	-48° 1'33	+3° 1'66				9	-30° 4'89	+62° 9'61	9° 4
14	+61° 7'87	-51° 4'11	66	1505	9° 8					9	-47° 5'61	+11° 6'80				11	-30° 3'48	+37° 6'15	
17	+61° 8'37	-23° 8'68	66	1504	9° 6					9	-47° 5'34	+46° 1'70				13	-29° 7'20	+4° 0'83	65
11	+62° 0'00	-48° 3'57								10	-47° 0'34	+61° 7'98				14	-29° 1'25	+28° 8'20	1614
										10	-46° 9'96	+33° 4'69				9	-28° 8'72	+30° 1'34	9° 8
9	+62° 2'18	-2° 2'91								9	-46° 8'28	+7° 1'97				13	-28° 7'63	+40° 6'48	
9	+62° 6'72	-54° 9'90								11	-46° 4'54	+4° 2'55				11	-28° 4'22	+9° 0'01	
12	+62° 6'72	-23° 0'62								9	-45° 5'18	+32° 4'15				9	-28° 3'10	+7° 9'77	
12	+62° 7'14	-46° 9'49								10	-45° 0'03	+58° 3'87	64	1612	9° 8	11	-27° 5'75	+38° 1'85	
34	+62° 7'66	-4° 9'52	65	1594	8° 6					15	-44° 9'27	+59° 8'97	64	1613	9° 4	10	-27° 5'56	+16° 6'42	

11^h 6^m. - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
30	-27.448	+61.756	64 1628	9.2	14	-11.902	+26.704			13	+5.086	+63.997			9	+24.598	+57.065		
13	-27.276	+11.138	65 1616	9.8	30	-11.880	+47.536	65 1628	8.9	17	+5.201	+17.547	65 1637	9.6	14	+24.686	+14.848		
12	-27.158	+28.272			10	-11.876	+46.850			13	+5.601	+13.241			14	+24.694	+34.878		
11	-27.160	+45.798			12	-11.741	+42.800			22	+6.166	+2.270	65 1638	9.3	9	+25.155	+1.564		
9	-26.952	+26.698			9	-10.917	+21.800			15	+6.169	+45.304			11	+25.330	+54.678		
12	-26.881	+20.928			20	-10.528	+30.735	65 1629	9.4	11	+6.508	+39.882			10	+25.356	+2.248		
11	-26.048	+47.817			13	-10.313	+41.346			12	+6.549	+47.712			13	+25.672	+25.055		
13	-25.987	+38.564	65 1617	9.9	18	-9.317	+47.346	65 1630	9.6	9	+7.171	+42.853			9	+25.786	+58.662		
14	-25.491	+44.303	65 1618	9.8	9	-8.984	+42.458			11	+7.224	+44.265			10	+26.014	+5.054		
11	-25.381	+39.357			9	-8.664	+50.652			11	+7.225	+44.019			11	+26.208	+25.815		
	121					181					241					301			
11	-24.414	+36.371			13	-8.531	+49.878			13	+7.962	+16.790			10	+26.431	+49.243		
15	-24.108	+37.631	65 1619	9.6	12	-8.467	+40.856			20	+8.108	+4.895	65 1639	9.3	34	+26.503	+39.556	65 1646	8.5
42	-23.662	+62.485	64 1629	8.3	9	-8.289	+41.000			24	+8.254	+11.202	65 1640	9.2	12	+26.564	+27.421		
20	-23.502	+49.577	65 1621	9.4	12	-8.243	+4.436			12	+8.485	+53.180			9	+26.785	+43.075		
10	-23.298	+21.846			18	-7.889	+45.793	65 1631	9.6	11	+8.584	+43.070			9	+26.868	+11.286		
9	-22.852	+54.885			9	-7.888	+2.372			22	+8.958	+55.563	64 1639	9.3	11	+26.888	+26.087		
13	-22.764	+36.009			9	-7.804	+30.458			12	+9.049	+42.389			13	+27.129	+20.011		
14	-22.345	+43.858			26	-7.792	+35.003	65 1632	9.1	10	+9.097	+45.506			18	+27.212	+51.084		
9	-22.153	+52.227			10	-7.728	+35.061			23	+9.454	+5.539	65 1641	9.0	9	+27.237	+17.407		
12	-21.975	+2.946			13	-7.727	+61.642			10	+9.476	+13.231			12	+27.368	+9.183		
	131					191					251					311			
12	-21.798	+62.548			10	-7.437	+30.962			10	+9.610	+3.818			26	+27.482	+16.531	65 1647	9.0
10	-21.600	+6.695			13	-7.408	+9.315			11	+9.681	+54.820			11	+27.747	+47.498		
11	-21.109	+17.197			10	-7.238	+6.939			13	+10.347	+44.795			12	+28.261	+11.476		
20	-20.730	+47.639	65 1622	9.4	11	-6.961	+38.473			12	+10.504	+44.811			18	+28.439	+22.866		
26	-20.262	+32.343	65 1623	9.0	9	-6.896	+47.964			12	+10.602	+31.486			10	+28.539	+17.706		
9	-20.102	+50.865			11	-6.881	+30.273			10	+10.751	+2.228			9	+28.575	+48.738		
11	-19.090	+29.593			11	-6.668	+36.401			13	+12.203	+27.986			9	+28.710	+47.502		
14	-18.813	+11.953			10	-6.176	+31.421			11	+12.861	+18.190			11	+29.840	+58.692		
9	-18.346	+18.319			11	-6.163	+40.994			9	+13.173	+47.939			11	+30.542	+23.223		
9	-18.150	+32.339			14	-6.157	+33.779			9	+13.293	+47.084			12	+30.627	+39.776		
	141					201					261					321			
13	-17.810	+60.045			9	-5.949	+2.731			14	+13.427	+18.170			10	+30.778	+34.063		
12	-17.802	+48.012			9	-5.791	+62.820			13	+13.594	+42.111			9	+30.992	+3.902		
12	-17.739	+36.121			13	-5.397	+55.560			10	+13.756	+51.011			12	+31.125	+16.773		
11	-17.553	+6.452			13	-5.388	+13.370			12	+13.857	+20.777			18	+32.294	+26.890	65 1648	9.7
15	-17.488	+0.823	65 1624	9.7	10	-4.703	+31.078			13	+14.544	+10.569			38	+32.515	+1.790	65 1649	8.8
9	-17.280	+56.059			9	-4.081	+36.675			12	+14.567	+52.210			10	+33.070	+25.423		
11	-17.104	+52.365			11	-3.790	+29.441			11	+14.646	+4.836			10	+33.340	+0.895		
12	-17.054	+35.950			10	-3.535	+31.761			11	+15.052	+46.475			15	+33.546	+52.828		
11	-17.022	+30.633			12	-3.115	+11.628			10	+15.479	+6.005			15	+33.837	+44.511		
9	-16.667	+1.863			38	-3.068	+24.779	65 1633	8.8	20	+16.124	+49.761	65 1644	9.5	10	+34.002	+2.312		
	151					211					271					331			
9	-16.553	+51.269			9	-2.440	+16.381			14	+16.371	+8.064			9	+34.197	+40.372		
10	-16.285	+28.082			9	-2.217	+26.135			12	+16.482	+54.254			9	+34.551	+44.433		
10	-16.228	+1.814			11	-1.520	+47.704			13	+16.573	+4.593			18	+34.686	+3.704	65 1650	9.7
10	-15.972	+36.389			11	-1.038	+51.957	65 1634	9.5	9	+17.066	+37.398			14	+34.926	+61.055		
14	-15.708	+18.040			18	-0.852	+40.917			9	+17.186	+56.818			14	+35.735	+18.488		
10	-15.689	+60.272			9	-0.492	+55.323			12	+19.446	+36.024			9	+35.952	+23.948		
14	-15.353	+33.386			20	+0.256	+51.769	65 1635	9.2	14	+20.221	+60.182			10	+35.978	+42.804		
20	-15.323	+44.827	65 1625	9.2	18	+0.692	+58.787			13	+20.551	+51.214			15	+36.148	+55.490		
12	-15.205	+7.830			10	+0.854	+43.630			12	+20.927	+31.609			14	+36.603	+37.310		
10	-15.150	+46.270			10	+0.890	+5.071			11	+21.903	+13.282			15	+36.756	+53.691		
	161					221					281					341			
9	-15.060	+3.456			9	+0.932	+59.301			12	+22.040	+32.306			14	+36.800	+15.238		
10	-14.747	+55.449			11	+0.933	+2.727			12	+22.187	+23.729			23	+37.056	+43.240	65 1651	9.3
13	-14.704	+61.616			9	+1.965	+11.537			10	+22.287	+24.311			13	+37.104	+15.431		
15	-14.433	+41.113			17	+2.163	+6.301	65 1636	9.6	11	+22.383	+29.645			12	+37.516	+24.840		
20	-14.387	+0.013	65 1626	9.5	10	+2.387	+58.125			10	+22.597	+43.340			9	+37.572	+45.770		
11	-13.638	+19.636			9	+2.426	+0.816			15	+22.707	+44.815			9	+38.700	+17.211		
15	-13.261	+23.828	65 1627	9.7	12	+3.021	+8.793			12	+23.071	+57.653			10	+39.054	+24.404		
9	-13.186	+30.190			14	+3.773	+48.949			18	+23.567	+42.162			9	+39.326	+0.315		
11	-13.040	+33.349			9	+4.615	+23.679			9	+23.807	+55.705			18	+39.028	+0.627	65 1652	9.6
14	-12.636	+33.941			10	+4.745	+54.651			12	+24.019	+55.664			14	+40.148	+12.463		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
10	+40°335	+ 4°535			9	-62°992	-11°908			14	-45°715	-50°716	66°1505	9°8	17	-32°808	-60°967	66°1518	9°7
10	+40°400	+ 6°641			10	-62°802	-54°584			11	-45°713	-47°669			19	-32°607	-17°029	66°1520	9°4
17	+40°811	+55°189			9	-62°450	-30°452			10	-45°681	-61°866			10	-32°426	-58°949		
16	+41°139	+30°771			12	-61°677	-46°771	66°1488	9°8	10	-45°631	- 0°903			12	-32°367	-27°590		
13	+41°854	+31°153			15	-61°504	-58°012	66°1487	9°6	12	-45°114	-46°207			10	-32°125	-49°449		
10	+42°245	+12°536			17	-61°492	- 8°825	65°1582	9°6	11	-45°092	-18°280			39	-31°622	-21°377	66°1524	8°5
13	+42°492	+45°344			12	-61°401	- 1°348			9	-44°559	-54°227			18	-31°619	-54°457	66°1521	9°5
19	+42°669	+ 9°227	65°1653	9°5	9	-61°117	-42°736			10	-44°505	- 9°193			18	-31°554	-53°854	66°1522	9°5
11	+42°938	+31°825			14	-60°926	- 6°302			14	-44°398	-27°458			10	-31°444	-14°930		
9	+43°943	+38°615			14	-60°685	- 4°074	65°1583	9°9	10	-44°213	-53°361			32	-31°289	-59°425	66°1523	9°1
	361					421					481					541			
13	+44°514	+25°210			12	-59°940	-20°425	66°1489	9°8	12	-43°600	- 8°700			12	-30°930	-31°701		
9	+44°620	+10°924			12	-58°641	-27°130	66°1491	9°8	9	-43°569	-61°913			9	-30°833	-17°202		
12	+45°630	+ 9°997			13	-58°618	- 3°040			22	-43°070	-46°371	66°1506	9°2	12	-30°645	-29°110		
13	+46°238	+52°082			9	-58°555	-10°698			9	-43°019	-35°953			11	-30°611	-34°635		
12	+47°230	+ 3°657			34	-58°521	- 2°264	65°1584	8°9	12	-42°959	-17°924			9	-30°362	-58°811		
10	+47°295	+ 4°235			9	-58°245	-12°300			10	-42°087	- 5°462			11	-30°293	-37°493		
10	+47°355	+39°403			12	-57°467	-12°180			12	-42°020	-44°665			10	-30°282	- 2°870		
9	+47°646	+12°251			10	-57°292	-20°147			9	-41°574	-42°549			10	-30°104	-24°299		
9	+48°623	+18°741			11	-57°172	-22°857			12	-41°256	-57°792			11	-30°070	-59°181		
10	+48°912	+45°621			10	-56°636	-53°244			14	-41°130	-10°093	66°1508	9°8	11	-29°821	- 5°537		
	371					431					491					551			
11	+48°926	+55°394			10	-55°462	- 5°297			24	-40°772	-36°175	66°1507	9°1	12	-29°081	-38°594		
12	+50°141	+28°236			13	-55°393	-28°675	66°1493	9°9	9	-40°619	- 4°153			10	-29°055	-51°655		
12	+50°395	+ 8°156			11	-55°225	-57°346			11	-40°578	-13°124			12	-28°797	- 3°596		
11	+51°277	+41°980			14	-55°214	-15°257	66°1494	9°9	12	-40°492	-62°591			14	-28°366	-14°832	66°1526	9°9
11	+51°340	+51°104			12	-55°080	-23°148			14	-39°922	-27°988	66°1509	9°9	14	-27°946	-10°538	66°1528	9°9
12	+51°506	+ 5°273			15	-54°503	-56°680	66°1492	9°5	11	-39°788	-48°036			9	-27°560	-10°248		
11	+52°156	+26°079			11	-54°439	- 6°808			11	-39°632	-53°532			13	-27°473	-56°570		
13	+52°465	+ 1°429			14	-53°687	- 9°535	66°1496	9°9	9	-39°472	-48°087			9	-27°280	-25°600		
12	+52°597	+25°143			19	-53°642	-20°731	66°1495	9°4	15	-39°370	-28°626	66°1510	9°7	11	-26°188	-42°993		
11	+53°054	+48°339			13	-53°580	-36°759			12	-39°253	-17°798			10	-25°828	-10°629		
	381					441					501					561			
34	+53°105	+60°199	64°1648	9°0	9	-53°275	-26°735			9	-39°223	-58°826			9	-25°761	-23°609		
10	+53°148	+48°757			11	-53°232	-28°140			12	-38°912	- 3°346	66°1512	9°7	20	-25°739	-24°775	66°1529	9°3
11	+53°368	+47°152			11	-53°185	-57°509			17	-38°862	-25°265			9	-25°126	-28°942		
9	+53°380	+53°755			14	-52°424	- 2°503	65°1590	9°9	9	-38°696	-35°017			11	-24°941	-42°242		
10	+53°433	+18°620			11	-52°252	-19°136			10	-38°609	-30°247			11	-24°848	- 1°991		
11	+53°924	+43°274			14	-52°024	-50°762	66°1497	9°8	14	-38°076	-38°098	66°1514	9°9	13	-24°758	-42°368		
10	+54°348	+21°796			18	-51°871	-38°494	66°1498	9°6	10	-38°060	-48°713			10	-24°480	-16°792		
14	+54°681	+30°103			11	-51°506	-34°100			11	-38°046	- 3°004			9	-24°109	-38°283		
10	+55°627	+35°901			11	-50°995	- 9°866			11	-38°035	-47°486			9	-23°985	-35°125		
12	+55°675	+15°550			14	-50°859	-62°808	66°1499	9°6	14	-38°035	-40°967	66°1513	9°8	9	-23°891	- 7°190		
	391					451					511					571			
16	+55°949	+43°853			10	-50°694	-51°961			9	-37°875	-27°892			13	-23°682	-46°596		
9	+56°015	+ 5°436			12	-50°603	-42°351			11	-37°845	-56°846			17	-23°434	-48°485	66°1530	9°7
12	+56°175	+47°601			16	-50°528	-60°807	66°1500	9°6	10	-37°667	- 4°663			10	-23°402	- 5°979		
14	+56°398	+50°716			12	-49°800	-37°626			13	-37°597	-12°175			12	-23°265	- 4°428		
10	+57°136	+50°166			17	-49°536	- 9°903	66°1502	9°7	17	-37°216	-49°178	66°1515	9°7	12	-23°012	-46°805		
10	+58°100	+ 1°164			10	-49°485	-30°543			11	-36°925	-21°059			18	-22°983	- 0°183	65°1620	9°4
9	+58°269	+46°001			9	-48°875	- 1°705			11	-36°749	-30°149			11	-22°405	-55°961		
12	+59°120	+33°876			13	-48°744	-12°454			10	-36°746	-15°688			14	-22°366	-62°391		
22	+59°802	+30°254	65°1655	9°3	10	-48°739	-34°571			11	-35°629	-59°887			9	-22°267	-36°057		
13	+60°298	+24°789			10	-48°467	-41°203			12	-35°187	-14°368			9	-22°032	- 3°038		
	401					461					521					581			
12	+61°249	+62°196			13	-48°452	-34°191			20	-35°084	-46°030	66°1516	9°6	17	-21°878	-50°933	66°1531	9°7
12	+61°627	+ 7°626			12	-48°377	-57°533			11	-34°414	- 7°244			15	-21°587	- 9°934		
14	+62°989	+ 2°348			32	-48°123	- 4°315	65°1594	8°6	12	-34°107	-27°866			12	-21°198	-19°295		
12	+63°917	+34°032			9	-47°956	-26°896			19	-34°092	-15°759	66°1517	9°5	10	-21°193	-34°309		
12	+63°972	+17°546			17	-47°671	-23°263	66°1504	9°6	10	-33°934	-47°616			10	-21°069	-22°056		
13	-64°597	-56°684	66°1482	9°8	22	-47°632	-43°091	66°1503	9°2	11	-33°782	-64°747			14	-21°059	- 5°426		
26	-64°214	-64°053	66°1483	9°2	13	-46°895	-22°389			16	-33°648	-18°657	66°1519	9°6	13	-20°217	-49°952		
19	-63°818	-32°437	66°1486	9°4	12	-46°662	-38°971			9	-33°549	-25°686			13	-19°898	-24°176		
30	-63°723	- 8°380	65°1580	9°1	12	-46°045	-32°405			12	-33°150	-45°124			12	-19°750	- 6°968		
10	-63°618	-26°067			18	-45°944	- 3°491	65°1595	9°5	12	-32°911	-64°941			16	-19°726	- 1°353		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	591					651					711					771			
9	-19°685	-32°664			11	-5°652	-4°709			11	+11°466	-33°485			10	+26°652	-31°467		
12	-19°625	-30°985			10	-5°492	-38°091			10	+12°184	-14°148			11	+26°824	-45°671		
15	-19°308	-18°730			13	-5°314	-31°329			9	+12°691	-44°043			9	+26°902	-34°031		
9	-19°220	-20°918			10	-5°279	-15°978			19	+12°858	-51°110	66 1547	9°5	22	+27°278	-32°079	66 1558	9°2
10	-18°608	-18°007			11	-4°568	-20°249			9	+12°898	-13°713			13	+27°928	-35°311		
11	-18°425	-34°004			11	-4°130	-53°179			24	+13°035	-3°813	65 1642	9°1	12	+28°202	-45°237		
9	-18°355	-26°527			11	-4°005	-37°187			11	+13°103	-26°245			10	+28°520	-14°727		
10	-18°116	-56°550			10	-3°540	-13°928			9	+13°243	-26°698			11	+29°256	-25°953		
17	-17°880	-35°054	66 1533	9°7	10	-3°252	-9°170			9	+13°411	-29°353			17	+29°442	-18°172	66 1559	9°7
12	-16°822	-16°187			10	-3°127	-29°310			17	+13°775	-7°671	65 1643	9°7	10	+29°732	-13°501		
	601					661					721					781			
11	-16°810	-24°650			12	-2°923	-30°228			10	+15°038	-27°830			9	+29°788	-52°737		
9	-16°301	-11°701			14	-2°830	-63°018			9	+15°140	-28°192			11	+29°940	-5°663		
11	-16°148	-42°388			10	-2°731	-34°280			12	+15°141	-14°342			10	+30°043	-27°212		
9	-15°423	-48°584			13	-2°424	-63°342			18	+15°206	-51°307	66 1548	9°6	13	+30°085	-1°291		
13	-15°188	-32°698			9	-2°181	-16°131			12	+15°756	-27°424			10	+30°291	-8°417		
11	-14°588	-30°398			24	-1°998	-38°269	66 1544	9°0	10	+15°848	-9°125			9	+30°294	-35°532		
16	-14°519	-8°813	66 1535	9°7	19	-1°515	-28°818	66 1545	9°4	14	+16°221	-36°602			12	+30°470	-23°709		
12	-14°055	-19°179			11	-1°319	-7°136			9	+16°471	-7°569			9	+30°564	-36°437		
11	-14°001	-9°789			9	-0°538	-45°476			10	+16°514	-30°635			9	+30°945	-7°165		
9	-13°698	-28°344			9	-0°470	-43°844			13	+16°583	-23°676			13	+31°101	-30°103		
	611					671					731					791			
9	-13°641	-16°981			10	+0°398	-15°655			14	+16°617	-26°422			11	+31°671	-64°039		
12	-13°572	-61°104			11	+0°406	-46°890			12	+16°648	-11°793			14	+32°068	-37°686		
10	-13°561	-51°816			11	+1°983	-15°279			14	+16°726	-4°383			15	+32°296	-39°013		
13	-13°245	-39°898			14	+2°027	-46°124			46	+16°884	-33°729	66 1550	8°2	13	+32°305	-62°572		
9	-12°703	-25°515			9	+2°180	-48°738			10	+17°158	-23°210			16	+32°382	-4°521		
20	-12°691	-38°485	66 1536	9°3	11	+2°546	-57°087			10	+18°371	-50°447			24	+32°465	-52°639	66 1561	9°2
15	-12°470	-32°350	66 1537	9°7	14	+2°552	-48°482			11	+18°659	-10°711			15	+32°522	-44°378		
9	-12°157	-58°511			13	+2°566	-36°497			9	+19°051	-29°783			10	+32°752	-17°968		
13	-11°865	-41°034			15	+2°604	-50°097			20	+19°246	-34°831	66 1551	9°2	12	+32°791	-31°825		
13	-11°514	-36°881			12	+3°119	-22°599			9	+19°384	-20°660			10	+32°911	-52°200		
	621					681					741					801			
22	-11°362	-34°801	66 1538	9°2	12	+3°458	-18°791			9	+19°581	-7°506			28	+32°949	-11°159	66 1560	9°0
10	-11°280	-11°317			11	+3°694	-40°404			10	+19°610	-14°508			11	+33°166	-13°138		
20	-10°775	-35°846	66 1539	9°2	10	+4°218	-49°383			10	+19°656	-52°521			12	+33°290	-40°322		
28	-10°191	-56°870	66 1540	9°0	14	+4°673	-3°751			40	+19°753	-18°584	66 1552	8°6	10	+33°294	-16°999		
11	-9°974	-5°999			12	+4°754	-63°997			9	+20°472	-29°875			12	+34°335	-25°665		
9	-9°595	-54°455			10	+4°853	-42°035			9	+20°519	-41°822			9	+35°333	-59°091		
11	-9°570	-21°271			12	+4°910	-54°793			17	+21°654	-32°495			14	+35°344	-29°638		
18	-9°209	-24°385	66 1541	9°7	10	+4°940	-33°127			19	+21°847	-1°323	65 1645	9°7	10	+35°476	-32°110		
9	-8°670	-12°010			10	+5°553	-41°277			11	+21°891	-1°483			18	+35°729	-28°754	66 1564	9°7
15	-8°656	-44°246			14	+5°588	-10°748	66 1546	9°7	11	+21°920	-12°442			20	+35°840	-21°687	66 1563	9°6
	631					691					751					811			
12	-8°614	-37°569			13	+6°235	-52°353			10	+22°053	-40°772			9	+36°189	-13°818		
10	-8°194	-18°006			9	+6°552	-35°893			9	+22°165	-55°738			12	+36°219	-40°069		
10	-8°146	-63°138			15	+6°571	-47°220			9	+22°225	-44°307			12	+36°326	-30°910		
10	-8°075	-33°968			11	+7°141	-2°570			10	+22°600	-52°667			10	+37°555	-4°205		
12	-7°914	-10°544			9	+8°096	-9°679			9	+22°652	-25°814			14	+37°786	-60°956		
10	-7°039	-42°864			11	+8°114	-41°489			14	+22°665	-22°834			9	+38°301	-36°373		
12	-6°857	-37°215			14	+8°172	-39°675			10	+23°364	-27°993			18	+38°473	-50°768	66 1566	9°5
9	-6°855	-47°265			14	+8°380	-44°292			18	+23°381	-17°584	66 1553	9°7	9	+38°486	-43°723		
13	-6°816	-43°609			9	+8°558	-16°952			24	+23°870	-12°736	66 1554	9°2	9	+38°496	-27°505		
9	-6°779	-17°550			14	+8°582	-1°459			10	+24°013	-12°636			14	+39°005	-18°519		
	641					701					761					821			
11	-6°672	-20°564			10	+8°694	-37°955			13	+24°167	-22°435			12	+39°184	-62°348		
10	-6°615	-55°886			12	+8°745	-9°902			18	+24°251	-47°545	66 1555	9°7	12	+39°557	-14°952		
18	-6°577	-42°226	66 1542	9°4	11	+9°108	-20°305			11	+24°314	-60°422			19	+40°220	-8°447		
14	-6°462	-28°042			12	+9°259	-62°993			14	+24°353	-55°106	66 1556	9°7	12	+40°818	-63°494		
12	-6°289	-9°076			15	+9°599	-62°185			14	+24°412	-54°405	66 1557	9°7	26	+40°913	-23°349	66 1567	8°8
13	-6°204	-38°380			10	+9°814	-43°496			10	+24°824	-15°565			10	+41°261	-44°662		
10	-6°094	-1°812			12	+9°850	-32°857			12	+24°858	-16°218			9	+41°298	-5°480		
11	-6°013	-26°812			10	+10°580	-61°112			10	+25°778	-28°946			13	+41°302	-9°176		
15	-5°985	-54°011	66 1543	9°5	12	+10°723	-63°155			13	+26°439	-4°524			12	+41°872	-42°908		
9	-5°858	-21°455			14	+11°089	-60°435			9	+26°581	-22°746			14	+41°924	-53°716	66 1569	9°7

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.
831					891					PLATE CENTRE. 11 ^h 24 ^m , - 66°. Plate 1231. 1895, Apr. 25. PROVISIONAL CONSTANTS. <i>a</i> = - '01150 <i>d</i> = + '00113 <i>b</i> = - '00094 <i>e</i> = - '01121 <i>c</i> = - '1693 <i>f</i> = + '0578 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51				
9	+41.935	- 9.810	66 1568	9.0	13	+61.784	-36.901	66 1575	9.4	10	-38.612	+35.215	65 1657	9.4					
23	+42.081	-19.601			10	+61.895	-13.235			16	-38.392	+ 7.355			65 1658	9.7			
11	+42.860	-29.505			10	+62.796	-26.110			16	-37.714	+44.920			65 1659	9.4			
14	+42.970	-31.774			19	+63.362	-48.511			17	-37.497	+48.676							
10	+43.123	-12.621			12	+63.856	-45.269			10	-37.383	+25.151							
10	+43.449	-48.874	66 1571	9.3	9	+63.880	- 6.458	66 1572	8.1	10	-37.339	+43.050	65 1660	9.5					
11	+44.319	-53.244			11	+63.972	-49.431			10	-36.399	+19.460							
11	+45.135	-49.602			9	+64.654	-17.851			9	-36.334	+56.029							
11	+46.222	-18.605								16	-35.821	+24.942							
12	+46.567	-45.973								9	-35.706	+63.616							
841					851					861					871				
10	+46.756	-15.954	66 1573	8.9	13	+48.872	-35.752	66 1574	9.1	10	-63.898	+ 2.957	65 1661	9.0					
12	+47.462	-12.270			13	+49.120	- 6.903			9	-63.883	+34.375			24	-33.613	+ 0.915		
11	+47.585	-26.763			12	+49.456	-21.808			9	-63.873	+ 3.542			10	-33.601	+56.224		
9	+47.620	- 5.061			9	+50.662	-30.692			9	-63.132	+50.543			12	-31.289	+11.539		
10	+47.651	-53.200			10	+51.054	- 5.715			10	-62.720	+27.671			9	-31.061	+10.296		
13	+47.942	-49.174	66 1574	9.1	9	+48.779	-22.537	66 1575	9.0	9	-62.545	+41.456	65 1662	8.3					
10	+48.241	- 8.877			10	+48.872	-35.752			22	-62.013	+59.767			10	-30.412	+50.917		
9	+48.402	-42.778			13	+49.120	- 6.903			10	-61.242	+47.924			9	-30.176	+36.157		
9	+48.680	-31.044			12	+49.456	-21.808			11	-61.051	+ 7.655			9	-29.412	+51.648		
9	+48.779	-22.537			9	+50.662	-30.692			9	-60.833	+46.764			44	-29.255	+43.048		
851					861					871					881				
13	+48.872	-35.752	66 1574	9.1	10	+52.357	-38.701	66 1575	8.9	10	-60.049	+24.768	65 1663	9.5					
13	+49.120	- 6.903			11	+52.884	-35.856			11	-59.734	+ 4.878			15	-28.278	+11.019		
12	+49.456	-21.808			11	+52.952	-54.379			10	-58.518	+ 1.106			9	-28.045	+42.071		
9	+50.662	-30.692			10	+53.219	-16.006			12	-58.338	+29.858			9	-27.392	+42.318		
10	+51.054	- 5.715			10	+51.106	- 1.720			10	-58.075	+50.524			12	-27.036	+55.991		
9	+51.126	- 5.745	66 1574	9.1	10	+52.357	-38.701	66 1575	8.9	10	-58.056	+47.400	65 1664	9.2					
14	+51.293	-37.457			11	+52.884	-35.856			10	-58.034	+43.660			10	-26.345	+44.982		
20	+51.507	-54.901			11	+52.952	-54.379			9	-57.800	+35.691			9	-24.593	+17.566		
12	+52.249	-58.148			10	+53.219	-16.006			10	-56.300	+15.408			9	-22.406	+56.135		
10	+52.357	-38.701			10	+51.106	- 1.720			11	-54.186	+33.941			9	-21.496	+33.109		
861					871					881					891				
12	+52.462	-40.050	66 1574	9.1	10	+52.357	-38.701	66 1575	8.9	10	-54.042	+62.307	65 1665	9.7					
11	+52.884	-35.856			11	+52.884	-35.856			24	-53.211	+30.353			9	-18.727	+32.355		
11	+52.952	-54.379			10	+52.952	-54.379			9	-52.896	+ 1.228			10	-18.669	+32.338		
10	+53.219	-16.006			10	+53.219	-16.006			11	-52.352	+24.939			18	-17.053	+62.947		
10	+51.106	- 1.720			10	+51.106	- 1.720			10	-49.806	+ 7.933			20	-16.863	+ 0.633		
11	+54.224	-25.656	66 1574	9.1	11	+54.224	-25.656	66 1575	8.9	9	-49.408	+34.429	65 1666	9.7					
9	+54.294	-32.020			11	+54.294	-32.020			9	-49.355	+54.165			9	-15.260	+58.044		
11	+54.670	-12.497			12	+54.670	-12.497			9	-49.269	+59.339			9	-14.476	+28.859		
10	+54.809	-18.067			9	+54.915	-16.177			10	-48.185	+17.976			9	-13.269	+ 2.220		
9	+54.915	-16.177			10	+54.915	-16.177			12	-48.095	+ 2.762			11	-12.984	+62.898		
871					881					891					91				
11	+55.828	-16.491	66 1574	9.1	10	+55.828	-16.491	66 1575	8.9	14	-47.429	+36.377	65 1667	9.4					
18	+55.869	- 0.979			11	+55.869	- 0.979			9	-46.332	+33.786			9	-11.096	+16.184		
12	+56.381	- 7.384			12	+56.381	- 7.384			9	-45.678	+61.719			9	-11.078	+12.202		
10	+56.393	- 7.648			11	+56.393	- 7.648			10	-45.408	+34.269			10	- 9.843	+42.036		
11	+56.963	-34.092			11	+56.963	-34.092			24	-44.663	+34.304			10	- 9.609	+54.490		
11	+57.130	-56.895	66 1574	9.1	11	+57.130	-56.895	66 1575	8.9	9	-44.383	+61.248	65 1668	7.7					
9	+57.535	-17.737			9	+57.535	-17.737			10	-44.222	+60.450			12	- 9.257	+18.285		
11	+57.586	-17.657			11	+57.586	-17.657			10	-43.844	+57.906			14	- 8.961	+62.916		
11	+58.191	-64.345			12	+58.191	-64.345			10	-43.514	+25.942			9	- 8.014	+47.918		
12	+58.325	-11.155			12	+58.325	-11.155			9	-42.231	+41.035			16	- 7.497	+60.024		
881					891					91					101				
10	+59.850	-36.597	66 1574	9.1	10	+59.850	-36.597	66 1575	8.9	9	-42.221	+14.536	65 1669	9.7					
44	+60.031	-31.545			44	+60.031	-31.545			9	-41.292	+ 3.433			9	- 5.772	+22.253		
12	+60.059	-64.673			12	+60.059	-64.673			9	-41.261	+50.382			9	- 5.358	+56.943		
30	+60.586	-44.229			30	+60.586	-44.229			13	-41.193	+56.975			10	- 4.314	+28.103		
12	+60.603	-13.737			12	+60.603	-13.737			11	-40.731	+27.243			12	- 4.130	+58.727		
26	+60.865	-53.441	66 1574	9.1	26	+60.865	-53.441	66 1575	8.9	9	-40.180	+ 8.347	65 1670	9.4					
11	+61.111	-18.994			11	+61.111	-18.994			10	-39.821	+35.984			9	- 3.743	+64.587		
12	+61.529	-47.752			12	+61.529	-47.752			10	-39.420	+37.026			14	- 3.363	+ 0.310		
12	+61.550	-38.252			12	+61.550	-38.252			9	-38.846	+42.586			10	- 3.303	+39.117		
11	+61.643	-14.824			11	+61.643	-14.824			9	-38.652	+45.414			21	- 3.246	+53.046		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
12	- 1' 891	+ 9' 595			11	+ 20' 647	+ 49' 576			18	+ 38' 507	+ 29' 302	65 1685	9' 7	10	+ 50' 833	+ 63' 123		
10	- 1' 413	+ 1' 285			10	+ 20' 827	+ 15' 321			9	+ 38' 746	+ 22' 042			10	+ 50' 839	+ 5' 002		
9	- 0' 884	+ 49' 618			10	+ 20' 879	+ 59' 317			9	+ 38' 806	+ 18' 727			24	+ 50' 832	+ 20' 629	65 1691	8' 8
11	- 0' 238	+ 57' 244			22	+ 20' 901	+ 52' 157	64 1670	9' 2	9	+ 38' 812	+ 60' 216			12	+ 51' 106	+ 51' 332		
60	+ 0' 627	+ 3' 670	65 1669	7' 9	10	+ 21' 102	+ 7' 971			9	+ 39' 058	+ 54' 585			11	+ 51' 365	+ 28' 473		
9	+ 0' 785	+ 39' 499			17	+ 21' 208	+ 25' 730	65 1677	9' 5	10	+ 39' 644	+ 23' 765			9	+ 51' 964	+ 62' 391		
11	+ 2' 171	+ 45' 786			9	+ 21' 563	+ 35' 800			10	+ 39' 658	+ 27' 654			14	+ 51' 980	+ 10' 452	65 1692	9' 7
9	+ 2' 212	+ 57' 893			16	+ 21' 877	+ 27' 835	65 1678	9' 7	9	+ 39' 761	+ 32' 696			10	+ 52' 145	+ 45' 765		
10	+ 2' 488	+ 59' 085			10	+ 23' 220	+ 30' 090			9	+ 40' 043	+ 32' 623			9	+ 53' 179	+ 51' 084		
13	+ 3' 386	+ 14' 409	65 1670	9' 6	11	+ 23' 386	+ 53' 982			9	+ 40' 113	+ 24' 476			11	+ 53' 385	+ 3' 819	65 1695	9' 6
	121					181					241					301			
9	+ 4' 074	+ 52' 905			9	+ 23' 667	+ 17' 379			9	+ 40' 215	+ 56' 364			18	+ 53' 416	+ 37' 078	65 1693	9' 6
9	+ 5' 570	+ 61' 505			10	+ 24' 029	+ 46' 035			14	+ 40' 234	+ 48' 340			11	+ 53' 974	+ 16' 916		
9	+ 5' 714	+ 0' 746			9	+ 24' 052	+ 52' 158			9	+ 40' 254	+ 10' 694			9	+ 54' 098	+ 50' 147		
19	+ 5' 764	+ 26' 515	65 1671	9' 2	11	+ 24' 307	+ 57' 411			10	+ 40' 474	+ 17' 205			20	+ 54' 648	+ 44' 534	65 1694	9' 2
9	+ 5' 959	+ 2' 166			10	+ 26' 487	+ 23' 749			14	+ 40' 812	+ 12' 102			10	+ 54' 905	+ 22' 047		
10	+ 6' 018	+ 54' 051			40	+ 26' 949	+ 41' 471	65 1680	7' 8	10	+ 40' 824	+ 27' 111			9	+ 55' 024	+ 0' 483		
12	+ 6' 088	+ 35' 406			9	+ 27' 128	+ 37' 806			9	+ 41' 056	+ 25' 613			11	+ 55' 160	+ 0' 504		
10	+ 6' 555	+ 24' 943			20	+ 27' 478	+ 56' 154	64 1674	9' 2	9	+ 41' 328	+ 38' 729			12	+ 55' 438	+ 37' 292		
13	+ 6' 650	+ 9' 617	65 1672	9' 7	9	+ 27' 822	+ 31' 370			16	+ 41' 403	+ 20' 347	65 1686	9' 7	9	+ 55' 811	+ 52' 932		
9	+ 6' 950	+ 12' 894			10	+ 28' 181	+ 23' 057			12	+ 41' 414	+ 42' 688			9	+ 55' 920	+ 58' 252		
	131					191					251					311			
10	+ 7' 539	+ 20' 031			10	+ 28' 455	+ 18' 031			9	+ 41' 419	+ 32' 292			10	+ 56' 021	+ 38' 114		
9	+ 7' 674	+ 14' 703			9	+ 28' 627	+ 49' 436			9	+ 41' 564	+ 46' 098			14	+ 56' 814	+ 03' 892	64 1681	9' 6
9	+ 8' 352	+ 61' 041			9	+ 28' 825	+ 22' 213			10	+ 41' 586	+ 35' 405			10	+ 58' 161	+ 3' 050		
9	+ 9' 050	+ 61' 895			11	+ 28' 827	+ 42' 785			16	+ 41' 848	+ 21' 347	65 1687	9' 7	9	+ 58' 171	+ 41' 061		
9	+ 9' 215	+ 52' 291			12	+ 28' 994	+ 43' 248			9	+ 42' 208	+ 48' 922			10	+ 58' 561	+ 42' 159		
11	+ 10' 334	+ 45' 774			10	+ 29' 191	+ 22' 397			9	+ 42' 286	+ 30' 664			9	+ 58' 862	+ 19' 279		
9	+ 10' 645	+ 40' 801			9	+ 29' 434	+ 24' 285			10	+ 42' 355	+ 49' 046			18	+ 58' 994	+ 46' 551	65 1696	9' 7
12	+ 10' 916	+ 7' 089	65 1674	9' 7	12	+ 30' 125	+ 7' 283			10	+ 42' 761	+ 4' 443			10	+ 59' 459	+ 12' 999		
13	+ 11' 638	+ 33' 701			10	+ 30' 603	+ 32' 718			11	+ 42' 875	+ 55' 106			9	+ 59' 520	+ 63' 200		
11	+ 11' 971	+ 50' 733			14	+ 30' 889	+ 43' 290			9	+ 43' 499	+ 21' 677			9	+ 59' 579	+ 15' 079		
	141					201					261					321			
12	+ 12' 127	+ 62' 337			14	+ 31' 134	+ 26' 497			13	+ 43' 508	+ 11' 984			9	+ 60' 346	+ 1' 523		
9	+ 12' 514	+ 12' 613			10	+ 31' 455	+ 44' 017			17	+ 43' 525	+ 59' 246	64 1678	9' 5	38	+ 60' 632	+ 53' 236	64 1682	7' 5
9	+ 13' 075	+ 38' 061			10	+ 31' 578	+ 20' 695			9	+ 43' 532	+ 48' 620			11	+ 60' 949	+ 17' 376		
12	+ 13' 009	+ 58' 584			9	+ 32' 029	+ 16' 755			10	+ 44' 344	+ 11' 084			9	+ 61' 192	+ 37' 941		
9	+ 13' 990	+ 44' 039			20	+ 32' 113	+ 17' 133	65 1681	9' 2	9	+ 44' 873	+ 64' 247			9	+ 61' 939	+ 41' 215		
9	+ 14' 091	+ 45' 197			13	+ 32' 224	+ 31' 056			10	+ 45' 056	+ 63' 511			10	+ 62' 117	+ 42' 025		
10	+ 14' 111	+ 47' 051			12	+ 33' 069	+ 18' 111			12	+ 45' 379	+ 7' 659			9	+ 62' 370	+ 50' 790		
9	+ 14' 516	+ 40' 085			10	+ 33' 210	+ 23' 281			10	+ 45' 867	+ 50' 295			9	+ 63' 800	+ 55' 773		
9	+ 15' 318	+ 40' 721			15	+ 33' 311	+ 23' 516	65 1682	9' 6	9	+ 46' 024	+ 29' 501			18	+ 63' 811	+ 6' 316	65 1697	9' 7
12	+ 15' 417	+ 31' 833			11	+ 34' 156	+ 34' 563			10	+ 46' 192	+ 40' 796			10	+ 63' 989	+ 9' 492		
	151					211					271					331			
10	+ 15' 713	+ 19' 708			9	+ 34' 222	+ 27' 185			12	+ 46' 315	+ 19' 029	65 1688	9' 7	9	+ 63' 323	+ 19' 336		
10	+ 17' 161	+ 8' 193			15	+ 34' 287	+ 19' 193			9	+ 46' 342	+ 18' 871			9	+ 63' 003	+ 16' 050		
11	+ 17' 189	+ 13' 617			10	+ 34' 350	+ 31' 030			18	+ 46' 450	+ 4' 195	65 1690	9' 7	10	+ 62' 798	+ 53' 990		
12	+ 17' 446	+ 15' 710			18	+ 34' 450	+ 24' 005	65 1683	9' 2	10	+ 46' 455	+ 37' 077			10	+ 62' 554	+ 12' 916		
40	+ 17' 546	+ 48' 855	65 1675	8' 6	19	+ 35' 184	+ 64' 110	64 1676	9' 4	32	+ 46' 858	+ 27' 248	65 1689	8' 5	9	+ 62' 212	+ 50' 298		
13	+ 17' 598	+ 58' 313			10	+ 35' 300	+ 51' 321			10	+ 47' 050	+ 61' 982			9	+ 61' 410	+ 27' 364		
9	+ 17' 698	+ 58' 850			10	+ 35' 350	+ 4' 572	65 1684	9' 6	11	+ 47' 576	+ 22' 431			11	+ 61' 267	+ 7' 447		
9	+ 17' 751	+ 22' 179			9	+ 35' 379	+ 26' 100			9	+ 47' 751	+ 11' 387			11	+ 61' 052	+ 46' 582		
10	+ 18' 358	+ 50' 824			10	+ 35' 837	+ 9' 651			11	+ 47' 876	+ 11' 297			11	+ 59' 895	+ 22' 280		
10	+ 18' 402	+ 43' 754			9	+ 35' 903	+ 45' 521			10	+ 47' 969	+ 50' 992			11	+ 59' 495	+ 36' 240		
	161					221					281					341			
10	+ 18' 464	+ 53' 778			9	+ 36' 029	+ 29' 554			9	+ 48' 117	+ 50' 998			11	+ 59' 484	+ 49' 690		
14	+ 18' 508	+ 55' 036			11	+ 36' 541	+ 2' 450			9	+ 48' 269	+ 41' 816			9	+ 59' 476	+ 53' 754		
9	+ 18' 554	+ 62' 163			9	+ 36' 650	+ 28' 839			12	+ 48' 500	+ 31' 087			12	+ 50' 936	+ 37' 706		
9	+ 18' 654	+ 1' 863			10	+ 36' 859	+ 7' 829			11	+ 48' 548	+ 2' 805			9	+ 56' 662	+ 1' 919		
9	+ 18' 657	+ 8' 580			9	+ 36' 993	+ 29' 765			14	+ 48' 991	+ 30' 548			9	+ 56' 534	+ 16' 234		
10	+ 19' 411	+ 6' 909			10	+ 37' 182	+ 60' 097			9	+ 49' 717	+ 28' 353			10	+ 55' 810	+ 38' 930		
9	+ 19' 636	+ 60' 903			9	+ 37' 451	+ 31' 698			11	+ 49' 843	+ 64' 793			10	+ 55' 565	+ 40' 283		
10	+ 20' 080	+ 5' 261			10	+ 37' 853	+ 31' 950			9	+ 49' 872	+ 27' 395			23	+ 55' 502	+ 55' 148	66 1571	9' 3
36	+ 20' 236	+ 8' 591	65 1676	8' 7	10	+ 38' 429	+ 38' 308			9	+ 49' 882	+ 43' 816			10	+ 55' 467	+ 30' 054		
10	+ 20' 438	+ 11' 410			9	+ 38' 491	+ 16' 197			9	+ 50' 661	+ 33' 064			9	+ 55' 336	+ 12' 640		

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
14	351		65 1654	9'6	9	411		66 1578	9'7	10	471		66 1590	9'0	9	531		66 1601	8'4
9	-54'964	-1'062			11	-34'652	-1'462			9	-7'616	-25'018			9	+15'284	-23'424		
9	-54'893	-58'396			11	-34'460	-21'125			9	-7'233	-36'233			9	+15'425	-22'674		
10	-54'878	-25'782			10	-34'418	-38'308			9	-6'835	-35'899			9	+15'692	-26'506		
9	-54'842	-16'285			10	-34'198	-23'493			9	-6'027	-36'463			11	+16'151	-18'874		
10	-54'561	-58'336			11	-34'121	-41'323			10	-5'558	-46'939			11	+16'449	-35'826		
9	-54'312	-33'035			9	-33'249	-61'103			11	-4'221	-31'871			9	+16'734	-1'467		
11	-54'112	-54'533			13	-31'647	-15'549			10	-3'432	-15'777			36	+16'809	-52'713	66 1601	8'4
10	-54'007	-7'419			12	-30'682	-25'924			9	-3'031	-19'042			11	+17'116	-30'177		
9	-53'969	-7'695			11	-30'634	-32'279			10	-1'314	-14'425			24	+18'072	-24'271	66 1602	9'4
9	-53'917	-16'530			11	-30'471	-0'969			9	-1'201	-12'960			9	+18'145	-14'530		
9	-52'116	-17'666			9	-30'440	-59'059			9	-0'195	-15'573			9	+18'342	-29'714		
9	-52'077	-35'251			9	-30'273	-17'541			28	+0'051	-63'612	66 1590	9'0	17	+18'523	-29'657	66 1603	9'5
10	-52'067	-17'580			9	-29'161	-18'025			9	+0'489	-28'323			9	+18'654	-40'814		
10	-51'793	-11'024			12	-28'868	-31'253			14	+0'497	-42'434	66 1591	9'6	10	+18'700	-31'311		
10	-51'540	-34'006			9	-28'636	-10'078			10	+0'539	-20'285			9	+18'844	-26'564		
11	-49'786	-56'727			9	-28'237	-50'141			11	+1'014	-17'242			9	+19'415	-2'815		
10	-49'345	-13'450			9	-27'125	-44'213			18	+1'252	-10'818	66 1592	9'4	10	+19'418	-5'185		
46	-48'660	-31'252	66 1572	8'1	12	-27'079	-20'031			11	+1'462	-24'646			9	+19'863	-16'828		
10	-48'490	-36'304			9	-27'055	-45'537			11	+1'863	-41'012			12	+19'899	-28'278		
9	-48'461	-18'660			10	-26'874	-43'901			9	+1'866	-17'537			11	+20'493	-27'941		
9	-48'224	-14'473			9	-25'906	-45'591			11	+2'153	-21'935			9	+21'066	-30'385		
11	-48'196	-64'077			14	-24'445	-31'840	66 1579	9'7	10	+2'207	-20'066			9	+21'200	-47'014		
9	-48'094	-12'856			44	-23'999	-27'749	66 1581	8'5	9	+2'295	-35'901			10	+21'637	-12'994		
9	-47'744	-60'256			9	-23'174	-30'215			9	+2'319	-36'746			10	+21'895	-37'383		
27	-47'198	-43'867	66 1573	8'9	9	-23'136	-16'923			11	+2'614	-64'220			40	+22'317	-29'761	66 1604	8'7
9	-46'882	-40'168			10	-22'984	-53'941			17	+2'695	-27'260	66 1593	9'3	11	+23'436	-13'726		
10	-46'665	-37'830			10	-22'898	-31'112			11	+3'132	-34'924			9	+23'672	-36'677		
11	-46'518	-36'476			10	-22'388	-33'451			11	+3'152	-14'058			56	+23'728	-25'128	66 1605	7'7
9	-46'487	-40'963			9	-22'022	-37'277			9	+3'309	-28'448			9	+23'879	-22'143		
12	-46'312	-64'268			24	-21'684	-15'879	66 1583	9'3	12	+3'845	-58'621			10	+24'330	-60'972		
10	-46'286	-25'636			30	-21'582	-62'124	66 1582	9'2	9	+4'174	-59'516			10	+24'388	-11'892		
26	-46'281	-53'037	66 1574	9'1	11	-21'262	-10'950			12	+4'655	-32'877			13	+24'405	-5'994	65 1679	9'7
11	-46'021	-47'313			44	-20'713	-35'401	66 1584	7'6	9	+5'135	-29'722			9	+24'472	-23'791		
9	-44'584	-25'744			9	-20'442	-33'799			10	+5'275	-38'037			12	+24'942	-53'811		
18	-44'152	-47'935	66 1575	9'4	9	-18'843	-33'551			11	+5'904	-32'115			14	+25'110	-63'124		
12	-44'098	-19'740			10	-18'211	-40'172			17	+6'046	-41'559	66 1594	9'4	9	+26'045	-60'748		
11	-43'892	-44'677			11	-18'159	-41'298			9	+6'876	-25'073			10	+27'301	-56'508		
11	-43'554	-26'486			9	-17'656	-38'239			11	+7'071	-62'981			11	+27'321	-26'416		
11	-43'472	-48'805			10	-17'410	-38'237			9	+7'907	-22'565			9	+27'508	-27'063		
10	-42'994	-55'829			12	-17'039	-29'415	66 1585	9'7	18	+8'025	-10'865	66 1595	9'4	11	+27'580	-11'966		
15	-42'719	-28'126	66 1576	9'6	9	-16'290	-39'622			40	+8'636	-32'023	66 1596	8'1	15	+27'610	-14'313	66 1606	9'7
11	-42'607	-35'506			9	-16'014	-16'678			9	+8'810	-5'873			11	+27'618	-19'064		
11	-42'506	-60'324			16	-15'147	-42'306	66 1586	9'4	10	+9'291	-32'507			11	+27'815	-0'144		
10	-41'660	-27'268			17	-12'065	-24'714	66 1587	9'5	10	+9'401	27'639			32	+28'024	-26'902	66 1607	8'9
10	-40'618	-46'342			11	-11'916	-43'050			9	+9'905	-42'676			10	+28'172	-29'378		
9	-39'982	-36'278			11	-11'213	-15'399			12	+10'397	-39'261	66 1597	9'7	14	+28'225	-37'359	66 1608	9'7
9	-39'908	-17'526			9	-10'731	-12'179			18	+10'447	-1'506	65 1673	9'4	11	+28'864	-25'630		
13	-39'402	-12'820			34	-10'650	-32'213	66 1588	8'8	13	+11'264	-11'928	66 1598	9'7	10	+28'946	-54'807		
9	-39'216	-19'758			10	-10'535	-63'188			10	+11'806	-21'723			11	+29'031	-53'495		
9	-38'647	-26'502			10	-10'438	-29'872			10	+11'810	-56'673			12	+29'129	-57'497		
9	-38'382	-32'413			11	-10'136	-42'474			11	+11'903	-29'804			9	+29'345	-57'376		
9	-37'596	-17'513			9	-9'658	-54'354			11	+12'025	-28'502			38	+29'398	-30'819	66 1609	8'6
9	-37'440	-34'729			12	-9'654	-27'580			12	+12'163	-19'242			10	+29'469	-33'622		
10	-37'347	-48'245			9	-9'365	-35'023			9	+12'432	-39'023			10	+29'550	-16'643		
10	-37'285	-62'191			9	-9'317	-19'768			11	+12'803	-28'544			9	+29'605	-64'636		
11	-36'859	-26'509			9	-9'220	-43'182			9	+12'884	-35'917			14	+29'668	-52'866	66 1610	9'6
9	-36'520	-32'126			9	-9'118	-19'245			11	+13'931	-9'971			9	+29'677	-35'657		
9	-36'122	-33'825			9	-9'064	-39'411			14	+14'488	-18'807	66 1599	9'7	9	+30'497	-8'751		
10	-35'572	-8'555			9	-8'367	-24'193			28	+14'951	-62'193	66 1600	9'0	13	+30'937	-55'814		
19	-35'509	-58'890	66 1577	9'6	10	-7'672	-61'500			10	+14'995	-32'561			9	+30'940	-54'687		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
	591					651					51			
10	+31 '548	-28 '368			19	+48 '090	-12 '476	66 1619	9 '2		10	-48 '782	+49 '406	
13	+31 '725	-56 '671			16	+48 '105	-54 '928	66 1621	9 '7		10	-48 '394	+47 '149	
12	+31 '768	-55 '175			9	+48 '140	-23 '326				12	-48 '067	+10 '292	
11	+31 '808	-39 '645			15	+48 '226	-35 '625	66 1620	9 '7		19	-48 '016	+7 '104	65 1697 9 '7
10	+32 '133	-26 '695			13	+48 '731	-59 '004				19	-47 '366	+32 '537	65 1698 9 '4
9	+32 '572	-19 '506			9	+49 '080	-64 '950				11	-47 '196	+32 '455	
10	+32 '685	-64 '468			10	+49 '135	-15 '091				10	-46 '967	+16 '044	
9	+32 '924	-11 '126			12	+49 '768	-17 '718				10	-46 '769	+17 '224	
9	+33 '363	-2 '692			9	+49 '903	-17 '792				10	-46 '198	+55 '829	
10	+33 '475	-53 '259			9	+50 '190	-54 '352				9	-46 '056	+23 '829	
	601					661						61		
9	+33 '915	-11 '553			9	+50 '637	-27 '062				10	-45 '830	+9 '243	
11	+34 '232	-49 '821			9	+50 '655	-58 '406				10	-45 '495	+17 '139	
9	+34 '628	-38 '439			9	+51 '069	-56 '356				9	-45 '412	+4 '560	
9	+35 '203	-61 '491			11	+51 '254	-62 '351				10	-45 '403	+8 '817	
11	+35 '911	-45 '292			11	+51 '462	-14 '978				9	-45 '188	+50 '280	
10	+36 '335	-19 '422			11	+51 '632	-2 '089				9	-44 '122	+53 '622	
9	+36 '352	-10 '373			24	+51 '675	-59 '186	66 1625	9 '2		12	-43 '579	+62 '111	
11	+36 '421	-16 '064			35	+51 '838	-53 '079	66 1624	8 '8		10	-43 '567	+23 '496	
9	+36 '642	-63 '022			9	+51 '903	-16 '033				11	-43 '566	+42 '252	
13	+36 '802	-7 '713			10	+52 '100	-31 '992				22	-43 '462	+46 '916	65 1699 9 '4
	611					671						71		
9	+36 '835	-8 '091			13	+52 '163	-63 '184	66 1627	9 '7		12	-43 '400	+24 '326	
10	+37 '616	-63 '918			9	+52 '168	-60 '438				12	-43 '104	+2 '901	
10	+37 '869	-11 '315			9	+52 '197	-37 '405				14	-42 '986	+51 '092	
12	+37 '926	-47 '462			13	+52 '365	-38 '778				13	-42 '628	+57 '397	
10	+38 '114	-53 '281			9	+52 '426	-53 '811				12	-41 '743	+36 '719	
12	+38 '506	-6 '209			12	+52 '438	-63 '336	66 1628	9 '7		15	-41 '203	+44 '492	
11	+38 '703	-57 '948			9	+52 '651	-59 '344				13	-40 '582	+27 '556	
13	+38 '934	-20 '178			10	+52 '696	-1 '397				10	-40 '489	+11 '251	
11	+39 '043	-30 '536			9	+53 '328	-44 '733				10	-40 '454	+42 '332	
10	+39 '571	-11 '391			9	+53 '511	-24 '516				10	-40 '344	+17 '965	
	621					681						81		
9	+39 '619	-15 '716			38	+53 '567	-21 '983	66 1626	8 '6		10	-40 '212	+49 '601	
10	+39 '972	-23 '489			9	+53 '704	-7 '607				12	-40 '183	+27 '418	
12	+40 '034	-61 '023			11	+54 '190	-29 '263				11	-40 '077	+18 '431	
14	+40 '158	-10 '666			11	+55 '606	-45 '391				12	-39 '996	+32 '095	
10	+40 '632	-15 '778			13	+55 '788	-24 '496				14	-39 '459	+39 '185	
9	+40 '894	-29 '859			9	+56 '616	-0 '879				17	-58 '226	+3 '857	65 1695 9 '6
9	+40 '964	-37 '193			11	+56 '621	-64 '276				12	-58 '072	+22 '754	
11	+41 '231	-32 '288			10	+56 '796	-39 '127				12	-58 '058	+38 '247	
24	+41 '299	-23 '449	66 1611	9 '3	9	+57 '613	-11 '297				10	-56 '391	+63 '539	
28	+41 '698	-23 '095	66 1612	9 '2	11	+58 '803	-29 '170				10	-56 '336	+0 '664	
	631					691						91		
10	+41 '964	-28 '747			11	+59 '305	-33 '088				13	-56 '204	+0 '679	
9	+42 '299	-40 '778			9	+59 '342	-11 '880				10	-56 '149	+41 '350	
9	+42 '530	-22 '492			9	+59 '893	-14 '151				12	-55 '832	+42 '482	
10	+42 '637	-7 '635			10	+60 '144	-46 '121				15	-55 '696	+46 '892	65 1696 9 '7
35	+42 '700	-62 '336	66 1614	9 '0	9	+60 '164	-1 '232				40	-54 '585	+53 '683	64 1682 7 '5
9	+43 '451	-18 '678			9	+60 '230	-4 '452				10	-53 '856	+19 '680	
9	+43 '614	-40 '468			30	+60 '687	-27 '444	66 1630	9 '1		12	-53 '392	+3 '436	
9	+44 '115	-5 '242			12	+60 '895	-15 '901				10	-52 '870	+15 '538	
11	+44 '224	-47 '874			9	+62 '038	-11 '258				12	-52 '824	+13 '454	
9	+44 '270	-8 '787			9	+63 '138	-29 '390				11	-52 '648	+51 '366	
	641					701						41		
13	+44 '449	-59 '648			9	+63 '210	-5 '408				10	-52 '404	+41 '760	
23	+44 '608	-50 '104	66 1615	9 '3	12	+63 '403	-28 '130				12	-52 '285	+42 '599	
12	+44 '879	-9 '209			12	+64 '260	-27 '812				12	-51 '649	+17 '929	
9	+45 '939	-13 '454			11	+64 '599	-64 '879				10	-51 '602	+56 '437	
19	+46 '012	-13 '046	66 1616	9 '2							11	-51 '094	+2 '068	
9	+46 '596	-51 '762									10	-50 '132	+27 '330	
10	+46 '948	-18 '578									10	-50 '090	+21 '095	
9	+47 '262	-51 '836									11	-49 '355	+42 '434	
30	+47 '358	-16 '962	66 1617	8 '9							10	-49 '185	+25 '852	
26	+47 '770	-16 '452	66 1618	9 '4							12	-49 '060	+52 '036	

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
11	-33°504	+7°151			14	-16°854	+47°756			11	-0°929	+51°960			13	+10°618	+25°535		
9	-33°379	+7°225			13	-16°818	+21°425			12	-0°745	+27°019			9	+10°627	+33°901		
15	-32°452	+34°015			13	-16°230	+11°475			12	-0°708	+10°270			10	+10°788	+34°804		
14	-32°089	+12°570			14	-16°151	+55°830			15	-0°539	+36°099			10	+10°849	+59°154		
12	-31°515	+50°595			11	-15°853	+14°667			10	-0°355	+23°597			11	+11°489	+53°154		
12	-30°962	+10°946			14	-15°551	+0°216			9	+0°107	+17°706			9	+11°626	+5°234		
10	-30°357	+20°251			10	-15°459	+42°556			12	+0°936	+10°786			13	+11°751	+41°968		
11	-30°209	+57°559			16	-15°131	+03°901			14	+0°949	+44°816			10	+11°765	+48°799		
13	-30°130	+17°946			12	-14°475	+28°119			10	+0°960	+55°938			9	+11°919	+41°998		
15	-29°836	+11°689			9	-14°238	+13°358			18	+0°984	+27°170	65 1713	9'7	10	+12°248	+35°240		
	121					181					241				301				
9	-29°661	+9°553			12	-14°123	+43°192			11	+1°004	+55°581			13	+12°375	+37°970		
13	-29°656	+55°662			10	-12°858	+33°323			13	+1°109	+31°996			12	+12°653	+14°561		
12	-29°587	+27°162			11	-12°710	+28°097			12	+1°113	+35°393			14	+12°683	+63°887		
10	-29°586	+60°042			9	-11°925	+4°541			14	+1°153	+48°514	65 1714	9'9	12	+12°745	+24°099		
10	-29°239	+18°532			11	-11°540	+39°911			9	+1°280	+58°060			12	+13°081	+51°006		
16	-29°044	+55°733			10	-11°254	+36°325			13	+1°378	+48°352			12	+13°135	+59°694		
9	-28°867	+17°665			13	-10°905	+20°973			10	+2°027	+8°351			11	+13°333	+36°358		
10	-27°753	+54°545			11	-10°714	+17°026			12	+2°388	+35°273			10	+13°354	+1°016		
14	-27°430	+14°006			17	-10°242	+3°607	65 1706	9'7	16	+2°390	+33°776	65 1716	9'9	11	+13°367	+38°147		
9	-26°960	+50°889			9	-10°226	+62°408			9	+2°595	+18°067			14	+13°405	+52°888		
	131					191					251				311				
9	-26°775	+0°626			18	-10°076	+52°087	65 1707	9'9	11	+2°607	+48°736			10	+13°694	+20°274		
10	-26°431	+14°094			10	-9°732	+62°904			9	+2°672	+0°676			10	+13°738	+9°385		
10	-26°370	+54°629			11	-9°682	+46°579			9	+2°820	+29°335			9	+14°252	+6°941		
11	-26°198	+55°555			10	-9°650	+10°938			11	+2°839	+36°017			11	+14°338	+35°400		
12	-25°742	+53°656			22	-9°013	+34°225	65 1708	9'2	16	+2°958	+8°271	65 1717	9'9	10	+15°075	+49°286		
11	-25°717	+31°249			14	-8°813	+53°349			10	+3°395	+56°791			16	+15°449	+10°421	65 1726	9'9
14	-25°510	+8°501			12	-8°532	+7°433			9	+3°513	+40°827			10	+15°457	+2°237		
23	-25°412	+20°536	65 1702	9'2	18	-8°527	+28°189	65 1709	9'9	9	+3°572	+32°531			10	+15°505	+13°183		
20	-25°315	+22°249	65 1703	9'5	9	-8°217	+59°814			10	+3°757	+35°196			11	+15°524	+18°327		
12	-25°146	+60°306			11	-7°217	+56°247			14	+4°246	+56°341			12	+15°564	+59°680		
	141					201					261				321				
12	-24°898	+0°680			10	-7°100	+16°793			11	+4°568	+7°948			20	+15°725	+33°097	65 1725	9'6
13	-24°893	+31°278			9	-6°947	+52°220			11	+4°613	+61°043			10	+16°128	+59°894		
10	-24°764	+5°009			10	-6°277	+4°132			11	+4°702	+55°125			14	+16°130	+10°739		
14	-24°577	+17°389			10	-5°812	+51°409			13	+4°786	+30°901			11	+16°148	+48°319		
11	-24°570	+39°152			11	-5°728	+31°038			9	+4°874	+20°320			14	+16°372	+12°309		
16	-24°559	+53°841			13	-5°377	+53°515			18	+4°973	+41°652	65 1718	9'9	10	+16°438	+16°247		
9	-24°369	+64°504			11	-5°064	+60°858			15	+5°080	+33°702			10	+16°534	+51°828		
12	-24°016	+42°202			13	-5°054	+26°629			12	+5°112	+29°153			10	+16°545	+60°820		
11	-23°836	+1°588			12	-4°943	+38°182			42	+5°192	+33°372	65 1719	8'0	10	+16°840	+28°668		
13	-23°727	+39°802			11	-4°895	+44°536			12	+5°384	+30°076			15	+16°976	+28°735	65 1727	9'9
	151					211					271				331				
11	-23°557	+44°368			11	-4°110	+57°678			10	+5°415	+19°198			10	+17°091	+31°653		
12	-23°323	+44°300			11	-4°072	+48°419			11	+5°486	+24°452			10	+17°160	+17°818		
11	-23°078	+62°425			15	-3°545	+11°492			14	+5°582	+51°026	65 1720	9'9	11	+17°186	+46°010		
11	-22°427	+8°712			12	-3°056	+57°229			10	+5°868	+31°495			10	+17°479	+54°606		
11	-22°082	+49°737			11	-3°022	+21°937			13	+6°193	+47°806			13	+17°637	+44°408		
12	-22°056	+31°226			10	-3°008	+12°474			11	+6°282	+57°127			13	+17°765	+29°055		
9	-21°916	+54°261			18	-2°723	+44°937	65 1710	9'6	10	+6°314	+28°152			10	+17°795	+31°382		
12	-21°482	+26°322			11	-2°709	+37°333			10	+6°531	+34°483			11	+17°867	+28°821		
36	-21°135	+17°977	65 1704	8'3	10	-2°677	+14°514			11	+6°624	+33°623			9	+17°897	+31°573		
20	-20°578	+54°117	64 1692	9'4	12	-2°421	+32°793			12	+6°786	+34°194			11	+17°970	+19°300		
	161					221					281				341				
13	-20°440	+10°647			10	-2°063	+61°095			16	+6°863	+18°114	65 1721	9'7	12	+17°982	+59°880		
12	-20°014	+53°532			16	-1°945	+25°340			13	+6°941	+18°938	65 1722	9'9	10	+18°105	+61°700		
9	-19°751	+45°475			10	-1°896	+38°929			10	+6°944	+54°390			16	+18°464	+16°022	65 1728	9'9
9	-19°335	+9°094			26	-1°776	+58°683	64 1705	9'0	9	+7°210	+31°566			11	+18°697	+30°112		
9	-19°317	+14°083			9	-1°691	+63°595			14	+8°012	+26°703			25	+18°989	+18°881	65 1729	8'9
9	-19°275	+32°951			15	-1°634	+23°819	65 1711	9'9	22	+8°080	+26°573	65 1723	8'9	9	+19°292	+19°795		
12	-18°718	+10°790			13	-1°430	+57°017			10	+9°169	+19°470			10	+19°829	+26°973		
12	-18°453	+39°935			13	-1°326	+42°444			15	+9°779	+17°244	65 1724	9'9	11	+20°141	+22°667		
12	-17°958	+22°156			15	-1°281	+63°933			13	+10°001	+13°137			13	+20°557	+2°643		
12	-16°916	+43°050			9	-1°278	+52°741			11	+10°242	+34°026			12	+20°619	+63°073		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
19	+21 '385	+51 '479	65 1730	9 '8	9	+31 '221	+37 '276			19	+44 '894	+34 '720	65 1740	9 '7	10	+64 '114	+23 '790		
9	+21 '510	+19 '907			16	+31 '242	+39 '594			13	+44 '935	+20 '749			9	+64 '115	+7 '385		
12	+21 '755	+42 '890			11	+31 '319	+37 '480			14	+44 '948	+17 '689			10	+64 '469	+33 '620		
9	+21 '989	+55 '700			12	+31 '995	+16 '954			12	+45 '285	+45 '662			9	-64 '781	-16 '373		
11	+22 '228	+57 '889			12	+32 '826	+38 '910			9	+45 '445	+24 '477			10	-64 '524	-8 '164		
11	+22 '306	+23 '345			9	+32 '844	+44 '333			9	+45 '770	+32 '278			9	-64 '505	-25 '557		
10	+22 '333	+47 '032			10	+32 '916	+27 '392			15	+45 '954	+62 '301	64 1733	9 '8	11	-64 '394	-13 '911		
9	+22 '433	+50 '535			9	+33 '264	+63 '892			10	+46 '101	+17 '261			20	-64 '352	-13 '508	66 1616	9 '2
13	+22 '493	+6 '516			14	+33 '444	+3 '045			10	+46 '816	+0 '361			18	-64 '090	-62 '925	66 1614	9 '0
15	+22 '641	+64 '986	64 1717	9 '9	13	+34 '063	+53 '984			14	+46 '988	+4 '482			10	-63 '620	-48 '380		
	361					421					481					541			
12	+22 '660	+16 '933			11	+34 '122	+41 '490			12	+47 '427	+44 '846			9	-63 '320	-23 '858		
12	+22 '762	+13 '780			11	+34 '143	+44 '304			14	+47 '646	+34 '560	65 1743	9 '9	9	-63 '222	-6 '593		
9	+22 '798	+4 '812			11	+34 '280	+1 '880			50	+48 '387	+10 '372			15	-63 '077	-50 '573	66 1615	9 '3
11	+22 '802	+19 '226			13	+34 '289	+46 '016			10	+48 '620	+53 '456			11	-63 '015	-18 '954		
10	+22 '851	+15 '019			14	+34 '301	+61 '097			12	+48 '646	+63 '379			24	-62 '741	-17 '313	66 1617	8 '9
9	+23 '009	+7 '215			13	+34 '437	+39 '964			10	+48 '870	+24 '459			13	-62 '524	-60 '109		
22	+23 '662	+14 '743	65 1731	9 '3	14	+34 '747	+22 '230			12	+48 '938	+4 '731			22	-62 '359	-16 '774	66 1618	9 '4
13	+23 '873	+36 '601			10	+34 '911	+15 '455			10	+49 '056	+26 '310			22	-62 '332	-12 '788	66 1619	9 '2
12	+24 '163	+59 '257			12	+35 '110	+59 '504			26	+49 '104	+6 '857	65 1746	8 '8	10	-61 '486	-23 '613		
12	+24 '221	+8 '673			10	+35 '848	+40 '522			12	+49 '240	+37 '833			11	-61 '080	-15 '322		
	371					431					491					551			
12	+24 '247	+32 '798	64 1718	9 '8	12	+36 '439	+29 '075			15	+49 '394	+27 '603	65 1745	9 '9	18	-60 '510	-35 '874	66 1620	9 '7
15	+24 '402	+59 '310			9	+36 '906	+10 '555			13	+49 '607	+40 '394			13	-60 '265	-17 '896		
14	+24 '583	+59 '943			13	+37 '373	+42 '349			14	+49 '672	+61 '791			10	-60 '123	-17 '960		
11	+24 '614	+29 '191			10	+37 '731	+14 '412			10	+50 '490	+53 '939			12	-59 '536	-2 '168		
10	+25 '108	+7 '665			9	+37 '789	+8 '280			9	+51 '091	+12 '321			9	-59 '384	-8 '089		
20	+25 '315	+49 '244	65 1732	9 '5	11	+37 '828	+50 '619			13	+51 '469	+11 '309			15	-59 '233	-55 '122	66 1621	9 '7
11	+25 '451	+5 '237			10	+38 '055	+26 '162			28	+51 '475	+8 '272	65 1747	8 '8	13	-58 '761	-15 '044		
10	+25 '073	+37 '894			10	+38 '202	+6 '587			11	+51 '481	+9 '945			10	-58 '701	-27 '166		
15	+25 '942	+23 '413			10	+38 '232	+53 '112			9	+52 '121	+27 '553			11	-58 '519	-1 '402		
9	+25 '947	+23 '256			12	+38 '239	+10 '452			14	+52 '129	+34 '053			14	-58 '321	-59 '147		
	381					441					501					561			
11	+26 '093	+7 '835	64 1719	9 '8	9	+38 '344	+18 '889			15	+52 '380	+35 '840	65 1748	9 '9	9	-58 '236	-16 '066		
15	+26 '402	+60 '829			14	+38 '361	+9 '437			14	+52 '905	+26 '040			9	-57 '944	-7 '581		
11	+26 '467	+37 '433			12	+38 '366	+50 '700			13	+52 '967	+57 '364			11	-57 '070	-7 '521		
11	+26 '631	+39 '984			11	+38 '392	+37 '111			12	+53 '159	+62 '189			10	-56 '915	-31 '978		
12	+26 '964	+63 '217			9	+38 '424	+36 '062			10	+53 '925	+40 '632			9	-56 '406	-37 '358		
12	+27 '895	+13 '364			13	+38 '545	+30 '848			14	+53 '974	+9 '628	65 1750	9 '9	36	-56 '194	-21 '869	66 1626	8 '6
12	+27 '920	+53 '850			14	+38 '600	+51 '990			24	+54 '582	+37 '173			14	-56 '156	-38 '716		
12	+28 '035	+6 '245			12	+38 '807	+14 '017			12	+55 '054	+28 '385			9	-56 '034	-24 '389		
21	+28 '053	+45 '838	65 1734	9 '4	11	+39 '730	+6 '471			11	+55 '493	+15 '767			36	-55 '647	-53 '008	66 1624	8 '8
10	+28 '124	+9 '230			11	+40 '196	+44 '812			10	+55 '845	+11 '976			12	-55 '548	-62 '305		
	391					451					511					571			
12	+28 '293	+21 '321			12	+40 '255	+32 '094			12	+56 '606	+51 '230			19	-55 '363	-59 '124	66 1625	9 '2
11	+28 '299	+40 '796			19	+40 '270	+36 '187	65 1737	9 '4	12	+56 '950	+62 '184			12	-55 '038	-29 '084		
23	+28 '371	+46 '184	65 1735	9 '3	11	+40 '493	+51 '758			10	+57 '105	+17 '304			10	-54 '626	-0 '613		
12	+28 '460	+11 '700			13	+41 '068	+51 '554			12	+57 '186	+22 '359			14	-54 '570	-63 '066	66 1627	9 '7
9	+28 '579	+21 '991			10	+41 '237	+59 '896			13	+57 '385	+23 '005			9	-54 '523	-20 '705		
9	+28 '583	+7 '337			10	+41 '332	+10 '048			10	+58 '010	+20 '424			9	-54 '375	-59 '204		
11	+29 '072	+60 '567			10	+41 '532	+24 '009			15	+58 '145	+11 '923			14	-54 '312	-63 '185	66 1628	9 '7
12	+29 '096	+5 '801			10	+41 '562	+14 '928			14	+58 '171	+40 '775	65 1751	9 '9	14	-53 '773	-24 '201		
11	+29 '197	+23 '309			13	+41 '707	+27 '959			9	+58 '353	+34 '394			10	-52 '906	-10 '916		
13	+29 '232	+33 '890			19	+42 '146	+24 '576	65 1738	9 '6	15	+58 '461	+51 '593			9	-52 '732	-16 '663		
	401					461					521					581			
15	+29 '275	+42 '532			10	+43 '088	+19 '124			19	+59 '170	+5 '360	65 1752	9 '4	12	-52 '444	-45 '073		
9	+29 '402	+34 '192			14	+43 '359	+34 '824			12	+59 '177	+23 '632			11	-51 '724	-38 '726		
13	+29 '821	+45 '400			13	+43 '456	+14 '054			15	+59 '702	+7 '774			11	-51 '159	-11 '384		
10	+29 '889	+15 '760			9	+43 '709	+9 '687			12	+61 '153	+27 '903			11	-50 '780	-3 '893		
10	+30 '085	+5 '434			12	+44 '244	+6 '294			12	+61 '411	+1 '281			11	-50 '437	-13 '588		
12	+30 '104	+6 '111			11	+44 '488	+44 '946			10	+62 '205	+47 '119			12	-50 '424	-28 '661		
9	+30 '402	+28 '675			11	+44 '609	+50 '902			9	+62 '665	+6 '505			10	-50 '329	-19 '883		
12	+30 '504	+21 '429			10	+44 '673	+21 '667			13	+63 '045	+7 '582			10	-50 '275	-44 '567		
14	+30 '714	+40 '461			12	+44 '674	+28 '094			15	+63 '112	+58 '630	64 1743	9 '8	12	-50 '063	-63 '815		
9	+31 '100	+28 '040			13	+44 '890	+16 '461			9	+63 '692	+4 '385			9	-49 '821	-6 '007		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.				
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.			
II	591				II	651					711					771						
I 3	-49° 636	-32° 525	66 1630	9° 1	II	-33° 646	-24° 886	66 1634	9° 6	II 2	-6° 868	-10° 530	66 1640	4° 6	I 2	-6° 447	-25° 387	66 1646	9° 8			
22	-48 664	-26 804			II	-33° 636	-14° 120			I 9	-21° 445	-11° 600			I 10	-6° 313	-42° 864			I 10	-6° 313	-42° 864
II	-48° 492	-10° 562			II	-33° 579	-16° 283			I 10	-21° 115	-24° 509			II	-5° 622	-46° 479			I 11	-5° 622	-46° 479
II	-47° 847	-45° 478			II	-33° 038	-30° 964			II	-20° 975	-32° 579			II	-5° 603	-46° 083			I 11	-5° 603	-46° 083
					I 10	-32° 893	-21° 541			I 18	-20° 190	-29° 925								I 10	-5° 570	-32° 366
					9	-32° 892	-47° 255			9	-20° 101	-24° 438								I 12	-5° 249	-16° 174
I 2	-47° 757	-4° 649			9	-32° 885	-11° 990			I 10	-19° 791	-13° 693			I 14	-4° 974	-13° 935					
I 10	-47° 188	-7° 307			I 17	-32° 381	-10° 908			I 10	-19° 510	-43° 570			9	-4° 951	-24° 246					
I 10	-46° 220	-16° 718			I 12	-32° 356	-32° 511			II	-19° 473	-26° 287			I 10	-4° 740	-42° 523					
9	-46° 101	-28° 548			9	-32° 195	-17° 095			I 12	-19° 270	-62° 483										
I 4	-45° 904	-27° 272				661					721					781						
	601				I 13	-32° 015	-19° 191			I 10	-19° 234	-5° 118			I 14	-4° 674	-24° 547					
II	-45° 663	-0° 249			II	-31° 504	-47° 577			I 10	-19° 064	-21° 490			I 12	-4° 471	-17° 031					
I 10	-45° 582	-32° 031			II	-30° 664	-19° 325			I 10	-18° 804	-23° 794			I 14	-4° 300	-49° 066					
I 10	-45° 510	-3° 371			I 10	-30° 489	-20° 925			9	-18° 754	-14° 638			I 12	-3° 985	-11° 647					
9	-45° 414	-14° 197			I 10	-30° 341	-30° 518			I 16	-18° 613	-0° 403	65 1705	9° 7	I 12	-2° 522	-64° 273					
I 4	-45° 081	-26° 908																				
II	-44° 805	-9° 475			I 12	-30° 094	-22° 715			I 13	-18° 120	-38° 091			II	-2° 177	-40° 091					
I 12	-44° 618	-14° 280			I 10	-30° 050	-56° 685			I 10	-18° 050	-38° 350			I 14	-2° 152	-60° 286					
9	-44° 276	-45° 369			I 12	-29° 934	-28° 682			I 10	-18° 035	-42° 798			II	-2° 125	-10° 535					
I 13	-44° 044	-1° 263			I 10	-29° 576	-18° 204			II	-17° 817	-42° 690			I 10	-1° 904	-6° 498					
9	-43° 482	-49° 019			9	-29° 564	-60° 246			II	-17° 556	-34° 532			9	-1° 748	-8° 017					
	611					671					731					791						
I 10	-43° 137	-2° 915			9	-29° 382	-31° 473			I 13	-17° 089	-47° 475			9	-1° 720	-59° 719					
I 10	-43° 070	-39° 845			I 10	-29° 248	-29° 886			I 12	-16° 939	-26° 541			24	-1 402	-18 214	66 1641 9° 0				
I 13	-42° 829	-38° 402			I 12	-29° 226	-18° 989			9	-16° 842	-23° 816			25	-1° 338	-6° 177	65 1712 9° 1				
I 10	-42° 335	-38° 786			I 12	-29° 200	-26° 041			I 14	-16° 266	-50° 240	66 1636 9° 9		II	-1° 206	-44° 460					
I 13	-42° 283	-26° 570			32	-29 172	-1 276	65 1700 8° 6		I 10	-16° 115	-33° 718			I 10	+ 0° 513	-8° 532					
I 4	-42° 082	-63° 839			II	-28° 905	-38° 717			I 12	-16° 055	-61° 968			II	+ 0° 544	-31° 157					
I 10	-41° 649	-25° 095			I 10	-28° 555	-22° 771			I 13	-15° 746	-37° 132			9	+ 0° 814	-53° 272					
I 10	-40° 939	-28° 858			9	-28° 086	-46° 549			I 12	-15° 621	-63° 777			I 10	+ 0° 897	-22° 289					
II	-40° 518	-11° 887			I 10	-28° 051	-23° 549			I 14	-14° 866	-57° 496			21	+ 0° 942	-18° 643	66 1642 9° 4				
9	-40° 323	-50° 429			I 12	-28° 045	-0° 248			I 12	-14° 581	-33° 701			9	+ 1° 027	-8° 259					
	621					681					741					801						
I 17	-39° 966	-9° 701			II	-28° 044	-17° 179			II	-14° 566	-41° 480			9	+ 1° 111	-40° 260					
I 10	-39° 403	-7° 667			9	-27° 893	-53° 585			9	-14° 458	-29° 250			I 10	+ 1° 525	-24° 544					
I 12	-39° 105	-43° 619			II	-27° 625	-57° 827			9	-13° 654	-38° 909			9	+ 1° 694	-49° 783					
9	-38° 949	-25° 122			9	-27° 470	-49° 615			II	-13° 641	-51° 973			I 14	+ 1° 764	-3° 156	65 1715 9° 9				
I 10	-38° 922	-36° 916			9	-27° 312	-61° 994			9	-13° 297	-2° 036			I 10	+ 1° 785	-22° 206					
I 10	-38° 753	-25° 508			I 13	-27° 303	-18° 552			9	-13° 177	-23° 826			9	+ 1° 795	-22° 573					
I 14	-38° 469	-47° 823			II	-27° 174	-36° 495			20	-12 970	-45 488	66 1637 9° 2		I 10	+ 1° 934	-53° 653					
I 10	-38° 377	-29° 689			I 12	-26° 941	-40° 703			I 12	-12° 785	-41° 468			I 10	+ 2° 055	-44° 121					
I 13	-37° 934	-62° 381			II	-26° 291	-20° 618			9	-12° 651	-26° 467			I 12	+ 2° 259	-11° 010					
II	-37° 915	-19° 968			I 10	-26° 285	-20° 238			I 10	-11° 780	-51° 168			II	+ 2° 719	-63° 586					
	631					691					751					811						
I 13	-37° 670	-54° 662			II	-26° 265	-6° 835			I 12	-11° 773	-12° 632			II	+ 2° 937	-26° 211					
9	-37° 502	-47° 831			I 10	-26° 227	-36° 527			I 13	-10° 665	-23° 850			II	+ 3° 005	-33° 332					
I 12	-37° 426	-25° 476			I 16	-25° 776	-4° 748	65 1701 9° 7		I 13	-10° 439	-58° 573			30	+ 3° 031	-64° 942	66 1643 8° 6				
9	-37° 421	-18° 324			I 10	-25° 765	-54° 139			II	-9° 808	-29° 110			I 17	+ 3° 273	-29° 223	66 1644 9° 7				
I 12	-37° 387	-37° 687			I 15	-25° 168	-18° 105			I 10	-9° 672	-33° 882			9	+ 3° 304	-59° 554					
II	-37° 284	-9° 473			I 10	-23° 987	-35° 831			9	-9° 582	-33° 797			I 15	+ 4° 164	-36° 171					
I 16	-36° 903	-27° 008			II	-23° 869	-20° 018			II	-9° 276	-31° 346			9	+ 4° 472	-53° 779					
II	-36° 576	-36° 444			II	-23° 355	-12° 902			I 13	-8° 739	-58° 598			I 10	+ 4° 618	-18° 689					
I 10	-35° 948	-8° 880			II	-23° 091	-58° 967			9	-8° 653	-40° 167			9	+ 4° 664	-57° 651					
I 4	-35° 612	-25° 861			I 13	-23° 062	-15° 069			I 13	-8° 592	-8° 395	66 1639 9° 7		I 16	+ 5° 149	-31° 237	66 1646 9° 8				
	641					701					761					821						
I 10	-35° 156	-52° 657			9	-22° 921	-64° 869			24	-8° 501	-39° 843	66 1638 9° 0		9	+ 5° 329	-41° 749					
I 12	-34° 787	-63° 465			I 13	-22° 548	-29° 694			I 10	-8° 108	-2° 820			I 14	+ 5° 400	-11° 376	66 1647 9° 9				
9	-34° 682	-59° 072			9	-22° 547	-20° 464			9	-7° 645	-39° 367			I 10	+ 5° 402	-11° 540					
I 10	-34° 571	-15° 294			9	-22° 267	-39° 469			9	-7° 580	-45° 733			9	+ 5° 447	-34° 601					
I 13	-34° 547	-61° 921			II	-22° 257	-63° 926			II	-7° 536	-10° 438			I 10	+ 5° 736	-45° 703					
I 13	-34° 255	-14° 968			II	-22° 111	-20° 642			9	-7° 326	-45° 925			9	+ 5° 891	-18° 300					
9	-34° 247	-28° 893			I 12	-22° 082	-27° 284			9	-7° 298	-14° 428			II	+ 6° 116	-33° 820					
I 13	-33° 941	-13° 625			I 13	-21° 934	-25° 846			I 10	-7° 207	-38° 697			I 10	+ 6° 201	-31° 657					
II	-33° 920	-62° 559			9	-21° 896	-50° 670			II	-7° 147	-43° 420			I 12	+ 7° 047	-11° 184					
II	-33° 652	-55° 258			II	-21° 664	-41° 628			I 10	-7° 043	-16° 860			9	+ 7° 824	-38° 171					

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	831,					891,					951,				PLATE CENTRE.				
	+ 8°016	-50°900				+27°375	-37°580				+44°126	-43°827			12 ^h 0 ^m . - 66°.				
11	+ 8°255	-34°439			14	+27°708	-62°486			9	+44°404	-18°252			Plate 1252. 1895, May 17.				
14	+ 8°405	-45°827			10	+27°846	-29°124			28	+44°891	-55°172	66° 1672	8° 8	PROVISIONAL CONSTANTS.				
12	+ 8°729	-15°644	66° 1649	7° 5	12	+29°405	-48°755			13	+45°137	-24°203			a = - '01139	d = + '00114			
12	+ 8°796	-13°943			11	+29°699	-32°835			12	+45°382	-24°479			b = - '00116	e = - '01122			
															c = - '0029	f = - '0130			
12	+ 8°909	-43°876			14	+29°700	-56°800	66° 1659	9° 9	17	+45°410	- 5°201	65° 1742	9° 9	To obtain standard co-ordinates, ξ, η				
11	+ 9°441	-36°219			11	+29°774	-29°352			11	+45°436	-10°790			$\xi = x + ax + by + c$				
19	+ 9°903	-26°288	66° 1650	9° 5	12	+29°831	-35°169			10	+45°500	- 9°789			$\eta = y + dx + ey + f$				
10	+10°428	-14°744			10	+30°439	-13°512			9	+46°651	- 2°715							
11	+11°090	-35°869			20	+31°321	-14°703	66° 1660	9° 4	12	+46°684	-21°476							
	841					901					961								
13	+12°204	- 4°017			9	+31°375	-33°120			10	+46°932	-17°257			10	-64°441	+ 3°864		
9	+12°393	- 1°728			13	+31°544	-51°151			10	+47°523	-28°167			10	-64°369	+39°869		
11	+12°501	-43°295			11	+31°895	-46°281			11	+47°532	-33°024			10	-63°666	+27°091	65° 1745	9° 9
9	+12°650	-18°638			9	+32°133	- 9°505			9	+47°928	-42°776			32	-63°452	+ 9°866	65° 1744	7° 2
12	+13°345	-63°084			11	+32°407	-54°799			10	+48°133	-26°393			18	-62°506	+ 6°381	65° 1746	8° 8
9	+13°634	-19°222			12	+32°601	-15°086			9	+48°832	-52°260			9	-62°201	+56°996		
11	+13°741	-19°594			9	+32°813	- 3°979			16	+49°828	-61°925	66° 1674	9° 4	10	-61°396	+33°719		
10	+13°798	-25°802			11	+32°992	-43°256			10	+49°846	-36°831			11	-61°265	+35°511	65° 1748	9° 9
13	+13°817	-44°843			11	+33°102	-30°662			10	+50°125	- 9°227			10	-60°445	+10°976		
9	+13°876	-30°487			10	+33°591	-53°648			9	+50°338	-11°164			19	-60°230	+ 7°983	65° 1747	8° 8
	851					911					971								
11	+14°031	-29°564			11	+33°607	-13°714			11	+50°705	-19°725			9	-60°050	+25°770		
10	+14°363	-21°147			11	+33°631	-25°102			20	+50°735	-19°864	66° 1673	9° 4	14	-59°149	+37°017	65° 1749	9° 2
9	+14°408	-13°916			14	+33°828	-46°483	66° 1661	9° 9	9	+51°381	-11°411			10	-57°849	+ 9°490	65° 1750	9° 9
10	+14°562	-31°389			11	+33°987	-31°834			14	+51°939	-56°283	66° 1675	9° 9	11	-56°325	+51°648	64° 1739	9° 8
13	+15°529	-16°581			13	+34°241	-38°599			10	+52°052	- 6°503			11	-55°839	+40°832	65° 1751	9° 9
32	+15°771	-55°761	66° 1651	8° 8	11	+34°387	-61°444			11	+52°351	-37°719			9	-55°378	+23°061		
10	+16°256	- 6°831			16	+34°966	-12°959	66° 1662	9° 9	13	+53°301	-35°700			11	-53°840	+12°072		
9	+16°754	- 5°916			14	+35°237	-51°829			9	+53°777	-15°537			9	-53°636	+23°819		
21	+16°996	-32°393	66° 1652	9° 2	10	+36°358	-24°703			12	+54°810	- 0°074			12	-52°342	+ 5°591	65° 1752	9° 4
9	+17°826	- 2°462			9	+36°388	-53°644			10	+55°227	- 8°335			11	-52°177	+58°986	64° 1743	9° 8
	861					921					981								
26	+18°067	-58°009	66° 1654	8° 9	12	+37°007	-34°117			9	+55°271	-10°153			10	-51°989	+ 8°045	65° 1753	9° 9
9	+18°214	-42°207			12	+37°419	- 9°147			11	+55°609	-36°105			9	-51°955	+28°222		
13	+18°275	-16°664	66° 1653	9° 9	16	+37°483	-50°008	66° 1663	9° 9	11	+55°705	- 2°303			10	-49°836	+ 1°692		
14	+19°126	-30°117			19	+38°749	-17°296	66° 1664	9° 9	10	+55°870	-33°479			9	-48°646	+ 8°084		
11	+19°360	-34°319			16	+38°903	- 8°335	65° 1736	9° 9	12	+56°739	-27°919			19	-48°340	+44°558	65° 1757	9° 0
10	+19°834	-12°666			15	+38°957	-34°441	66° 1665	9° 9	13	+56°822	-17°906			9	-46°537	+18°907		
20	+20°061	-37°281	66° 1655	9° 6	14	+38°994	-43°926			9	+57°948	- 3°680			9	-45°356	+58°137		
12	+20°081	-47°147			10	+39°485	-34°744			15	+58°275	-13°331	66° 1676	9° 9	12	-45°282	+24°558	65° 1758	9° 8
13	+20°954	-52°413	66° 1656	9° 9	11	+39°599	-35°409			12	+58°403	-54°041			15	-44°612	+12°876	65° 1760	9° 4
12	+21°136	-52°133			10	+39°808	-35°825			12	+58°551	-11°924			12	-44°506	+49°812	65° 1761	9° 7
	871					931					991								
15	+21°274	-26°760	66° 1657	9° 9	14	+39°961	-55°169	66° 1666	9° 9	14	+58°698	-38°547	66° 1678	9° 8	11	-44°319	+ 0°295	65° 1759	9° 8
10	+21°624	-56°189			10	+40°149	- 5°369			14	+59°035	-30°461	66° 1677	9° 9	13	-44°184	+49°976	65° 1762	9° 4
12	+22°626	-20°561			11	+40°288	-28°029			12	+59°513	-32°868			9	-40°830	+ 7°237		
11	+22°959	-44°902			11	+40°930	- 1°762			15	+60°595	- 7°073	65° 1754	9° 9	14	-40°536	+52°336	64° 1755	9° 4
12	+23°050	-14°338			11	+41°204	-38°285	66° 1668	9° 9	9	+61°135	-28°677			9	-38°939	+14°377		
12	+23°179	-46°565			12	+41°360	-10°145			13	+61°616	-60°725	66° 1680	9° 9	12	-38°485	+55°914	64° 1756	9° 9
11	+23°268	-57°920			16	+41°360	- 3°133	65° 1739	9° 9	9	+62°104	-52°443			10	-37°368	+61°963		
9	+23°650	-19°144			9	+41°446	-38°298			10	+62°539	-18°923			10	-36°617	+54°750	64° 1761	9° 9
12	+23°960	-16°146			18	+41°990	-22°465	66° 1669	9° 8	19	+62°586	- 8°376	65° 1755	9° 2	12	-36°519	+33°956	65° 1764	9° 5
22	+24°025	-57°157	66° 1658	9° 2	9	+42°196	- 0°057			12	+63°043	-42°471			11	-36°459	+15°831	65° 1763	9° 9
	881					941					1001								
9	+24°268	- 5°795			11	+42°280	-49°344			22	+63°101	- 3°442	65° 1756	9° 0	10	-32°599	+45°672		
13	+24°405	-43°998			10	+42°534	-44°191			14	+63°227	-18°359	66° 1679	9° 9	10	-32°423	+32°353		
12	+24°834	-51°285			11	+42°580	-36°818			11	+63°423	-10°079			11	-32°188	+33°566	65° 1765	9° 9
9	+24°891	-57°868			10	+42°965	-64°392			10	+63°465	-34°544			10	-31°693	+48°683		
10	+24°945	-20°747			13	+42°981	-13°932			10	+63°587	-14°533			9	-31°661	+23°248		
10	+24°952	-24°639			9	+43°078	- 4°201			9	+64°108	-28°611			9	-31°575	+ 2°646		
11	+25°257	-64°858			10	+43°169	-31°502								28	-30°523	+28°816	65° 1767	8° 6
10	+26°152	- 8°771			13	+43°240	- 4°241								15	-30°420	+18°165	65° 1766	9° 2
11	+26°237	-41°452			21	+43°524	-29°087	66° 1670	9° 1						14	-30°314	+39°515	65° 1768	9° 2
12	+26°267	-41°546			9	+43°838	-27°890								12	-29°510	+51°008	65° 1769	9° 9

PLATE CENTRE.

12^h 0^m, - 66°.

Plate 1252. 1895, May 17.

PROVISIONAL CONSTANTS.

a = - '01139 *d* = + '00114

b = - '00116 *e* = - '01122

c = - '0029 *f* = - '0130

To obtain standard co-ordinates, ξ, η

$\xi = x + ax + by + c$

$\eta = y + dx + ey + f$

10 -64°441 + 3°864

10 -64°369 +39°869

10 -63°666 +27°091

32 -63°452 + 9°866

18 -62°506 + 6°381

9 -62°201 +56°996

10 -61°396 +33°719

11 -61°265 +35°511

10 -60°445 +10°976

19 -60°230 + 7°983

11

9 -60°050 +25°770

14 -59°149 +37°017

10 -57°849 + 9°490

11 -56°325 +51°648

11 -55°839 +40°832

9 -55°378 +23°061

11 -53°840 +12°072

9 -53°636 +23°819

12 -52°342 + 5°591

11 -52°177 +58°986

21

10 -51°989 + 8°045

9 -51°955 +28°222

10 -49°836 + 1°692

9 -48°646 + 8°084

19 -48°340 +44°558

9 -46°537 +18°907

9 -45°356 +58°137

12 -45°282 +24°558

15 -44°612 +12°876

12 -44°506 +49°812

31

11 -44°319 + 0°295

13 -44°184 +49°976

9 -40°830 + 7°237

14 -40°536 +52°336

9 -38°939 +14°377

12 -38°485 +55°914

10 -37°368 +61°963

10 -36°617 +54°750

12 -36°519 +33°956

11 -36°459 +15°831

41

10 -32°599 +45°672

10 -32°423 +32°353

11 -32°188 +33°566

10 -31°693 +48°683

9 -31°661 +23°248

9 -31°575 + 2°646

28 -30°523 +28°816

15 -30°420 +18°165

14 -30°314 +39°515

12 -29°510 +51°008

65 1745 9°9

65 1744 7°2

65 1746 8°8

65 1748 9°9

65 1747 8°8

65 1749 9°2

65 1750 9°9

64 1739 9°8

65 1751 9°9

65 1752 9°4

64 1743 9°8

65 1753 9°9

65 1758 9°8

65 1760 9°4

65 1761 9°7

65 1759 9°8

65 1762 9°4

64 1755 9°4

64 1756 9°9

64 1761 9°9

65 1764 9°5

65 1763 9°9

65 1765 9°9

65 1767 8°6

65 1766 9°2

65 1768 9°2

65 1769 9°9

Diam.			C.P.D.		Diam.			C.P.D.		Diam.			C.P.D.		Diam.			C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
9	-29°166	+24°492			9	+14°397	+20°215			11	+48°004	+54°920	64 1819	9°9	13	-25°105	-20°619	66 1688	9°4
10	-28°666	+23°018			11	+14°915	+28°381	65 1792	9°9	9	+48°762	+0°438			9	-24°163	-38°837		
10	-28°233	+38°321			15	+17°078	+47°414	65 1793	9°1	10	+48°899	+44°038			10	-23°070	-26°330		
9	-26°315	+17°976			9	+17°581	+2°951			9	+49°100	+32°504			9	-20°782	-31°372		
11	-26°036	+25°113	65 1770	9°9	10	+18°055	+62°622			13	+49°256	+52°988	64 1821	9°4	11	-19°107	-40°592	66 1689	9°9
9	-25°502	+34°607			15	+18°721	+57°071	64 1800	9°4	10	+50°585	+24°433			9	-18°227	-32°800		
9	-24°752	+5°134			10	+20°298	+38°444			24	+51°094	+55°956	64 1823	8°2	11	-18°027	-40°492	66 1691	9°9
9	-23°054	+40°993			9	+20°375	+33°807			10	+52°546	+23°940			12	-17°195	-31°549	66 1692	9°9
10	-20°670	+47°842			9	+20°827	+22°811			9	+52°875	+03°991			11	-16°570	-20°226	66 1693	9°6
16	-20°637	+17°357	65 1771	8°9	10	+21°067	+62°201			9	+53°232	+40°769			13	-16°018	-15°625	66 1694	9°4
	61					121					181					241			
13	-20°220	+5°089	65 1772	9°4	9	+21°730	+11°771			9	+53°429	+5°344			9	-14°082	-47°746		
14	-18°883	+56°794	64 1773	9°4	10	+22°299	+30°886	65 1794	9°9	9	+54°297	+49°635			9	-12°101	-10°097		
17	-17°039	+38°823	65 1773	9°7	12	+22°616	+13°881	65 1795	9°8	14	+54°308	+31°660	65 1816	9°4	12	-11°021	-38°298	66 1695	9°9
9	-15°896	+52°786			9	+23°215	+44°198			10	+55°292	+23°505	65 1817	9°9	10	-10°945	-5°268		
30	-14°547	+55°721	64 1776	8°5	15	+23°304	+37°009	65 1796	9°2	14	+55°630	+24°051	65 1818	9°5	9	-9°814	-34°116		
16	-14°296	+37°967	65 1774	9°1	11	+24°554	+27°282	65 1797	9°5	9	+55°800	+28°973			11	-8°509	-2°216	65 1780	9°9
9	-14°280	+35°553			22	+25°146	+56°886	64 1802	8°8	34	+55°952	+0°851	65 1820	7°3	9	-6°834	-5°552		
9	-14°273	+33°514			34	+25°254	+27°024	65 1799	7°6	15	+57°154	+31°264	65 1821	9°2	30	-4°155	-15°033	66 1696	8°6
9	-14°209	+38°039			13	+25°614	+39°594	65 1800	9°4	9	+57°470	+5°936			22	-3°619	-29°946	66 1697	8°8
11	-13°841	+42°195	65 1775	9°9	14	+26°379	+61°034	64 1803	9°5	9	+58°211	+3°477			11	-2°543	-10°239	66 1699	9°5
	71					131					191					251			
10	-13°795	+57°483			20	+27°627	+55°950	64 1804	8°8	11	+59°506	+58°798	64 1828	9°5	11	+0°703	-27°693	66 1700	9°5
23	-13°485	+51°031	65 1776	8°7	9	+27°876	+58°398			14	+60°187	+32°230	65 1823	9°2	12	+1°161	-41°196	66 1701	9°3
11	-12°969	+43°926	65 1778	9°9	10	+28°959	+24°715	65 1801	9°9	11	+61°109	+14°575	65 1824	9°9	9	+2°569	-24°642		
17	-12°877	+21°024	65 1777	9°0	14	+29°793	+22°287	65 1804	9°4	9	+61°523	+10°377			9	+3°785	-39°591		
30	-12°381	+43°841	65 1779	8°5	9	+30°198	+51°275			10	+61°639	+47°003			11	+7°019	-48°392	66 1702	9°9
9	-11°193	+48°638			15	+30°310	+51°634	65 1803	9°2	9	+63°197	+45°551	65 1825	9°9	12	+11°290	-39°786	66 1703	9°6
14	-8°283	+36°613	65 1781	9°4	10	+30°370	+51°214	65 1802	9°6	14	+63°896	+50°214	65 1826	8°8	9	+14°935	-53°079		
11	-7°082	+27°071	65 1782	9°9	9	+30°964	+60°549			23	-02°327	-55°778	66 1672	8°8	9	+16°210	-30°299		
10	-7°027	+17°225			12	+31°152	+47°780	65 1805	9°5	13	-58°972	-20°157	66 1673	9°4	24	+17°638	-26°053	66 1704	8°8
12	-6°879	+61°945			9	+31°202	+57°640			11	-56°920	-62°179	66 1674	9°4	9	+17°812	-48°817		
	81					141					201					261			
9	-5°675	+42°086			10	+31°780	+1°257			9	-56°307	-0°134			12	+18°608	-23°689	66 1705	9°5
9	-5°114	+28°245			13	+32°229	+23°791	65 1807	9°5	9	-55°294	-35°786			9	+20°525	-50°264		
9	-4°704	+21°903			9	+32°234	+4°346			9	-55°177	-50°382	66 1675	9°9	9	+22°458	-50°113		
9	-4°570	+12°240			11	+32°608	+51°238	65 1806	9°9	10	-51°913	-13°108	66 1676	9°9	9	+22°673	-21°116		
9	-3°819	+64°914			10	+33°530	+21°693	65 1808	9°9	11	-50°045	-6°718	65 1754	9°9	12	+24°642	-5°873	65 1798	9°9
11	-2°743	+31°573	65 1783	9°9	9	+35°914	+40°012			12	-49°969	-30°131	66 1677	9°9	11	+25°221	-60°496	66 1706	9°9
13	-1°717	+62°349	64 1786	9°8	11	+35°940	+45°680	65 1809	9°9	11	-49°733	-38°217	66 1678	9°8	38	+25°922	-54°716	66 1707	7°3
9	-1°631	+38°175			9	+36°735	+34°024			9	-49°295	-32°496			9	+26°218	57°078		
11	-1°555	+38°061	65 1784	9°5	9	+37°077	+14°006			9	-48°930	-53°714			9	+27°230	-53°217	66 1709	9°9
13	+0°989	+24°315	65 1785	9°2	9	+37°139	+30°130			15	-47°971	-7°806	65 1755	9°2	18	+27°754	-10°000	66 1708	9°1
	91					151					211					271			
9	+3°272	+59°045			10	+38°403	+29°012			22	-47°803	-2°904	65 1756	9°0	9	+28°054	-27°806		
48	+4°588	+61°281	64 1791	6°9	14	+38°605	+25°401	65 1810	9°4	10	-46°630	-17°778	66 1679	9°9	9	+28°523	-5°604		
11	+4°616	+9°499	65 1786	9°5	12	+40°330	+19°901	65 1811	9°7	9	-45°249	-60°149	66 1680	9°9	10	+28°680	-9°849	66 1710	9°9
11	+4°949	+64°629	64 1793	9°7	9	+41°059	+29°622			9	-45°118	-41°839			9	+29°575	-26°458		
12	+6°563	+7°685	65 1787	9°5	11	+41°176	+57°424	64 1814	9°9	11	-43°895	-23°471	66 1681	9°7	24	+31°184	-37°999	66 1711	8°8
48	+7°070	+51°411	65 1788	7°1	9	+41°534	+03°407			9	-42°756	-30°191			9	+31°775	-40°726		
32	+7°806	+51°492			9	+41°821	+22°806			16	-41°481	-33°004	66 1682	9°4	9	+34°745	-46°601		
9	+8°029	+36°782			9	+41°971	+21°283			11	-40°025	-51°975	66 1683	9°9	9	+35°587	-18°108		
19	+8°806	+64°546	64 1795	8°6	9	+42°138	+15°865			12	-39°844	-9°010	66 1684	9°9	10	+36°334	-43°733		
9	+8°853	+17°971			10	+42°170	+39°249			9	-39°795	-14°934			9	+37°977	-0°999		
	101					161					221					281			
10	+8°951	+38°057	65 1789	9°9	18	+42°372	+18°907	65 1812	8°5	9	-39°067	-18°388			9	+38°787	-61°472		
10	+9°182	+45°603			9	+44°249	+23°339			9	-36°929	-63°531	66 1685	9°9	11	+38°831	-59°184	66 1712	9°7
10	+9°938	+56°781			9	+44°307	+59°355			10	-36°397	-10°702			17	+40°470	-9°031	66 1713	9°2
10	+10°312	+55°818			9	+45°084	+43°736			9	-34°282	-18°079			9	+41°357	-40°569		
9	+10°881	+31°318			16	+45°412	+32°692	65 1813	9°0	16	-33°087	-18°158	66 1686	9°3	9	+41°487	-28°555		
15	+11°444	+58°354	64 1797	9°5	10	+45°745	+48°352			9	-32°953	-43°145			12	+41°625	-59°190	66 1715	9°7
9	+11°708	+14°209			11	+46°896	+1°612	65 1815	9°9	23	-29°214	-30°957	66 1687	9°0	16	+42°207	-64°753	66 1716	8°9
12	+12°528	+36°851	65 1790	9°5	9	+47°106	+24°444			9	-28°140	-32°662			12	+42°255	-24°364	66 1714	9°9
9	+12°755	+54°717			12	+47°273	+45°305	65 1814	9°9	9	-27°698	-62°507			9	+42°357	-18°560		
24	+14°048	+39°811	65 1791	8°8	9	+47°287	+43°412			9	-26°638	-6°492			9	+43°997	-24°661		

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	
	291					PLATE CENTRE. 12 ^h 18 ^m , - 66°. Plate 3317. 1910, May 9. PROVISIONAL CONSTANTS. <i>a</i> = - '01153 <i>d</i> = + '00035 <i>b</i> = - '00037 <i>e</i> = - '01138 <i>c</i> = - '0141 <i>f</i> = - '0510 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$														
9	+45 '480	- 1 '730			9	-64 '987	+44 '206			16	-55 '905	+59 '057	64 1828	9 '5	10	111	45 '022	+ 32 '534		
9	+45 '768	-23 '957			9	-64 '880	+26 '550			10	-55 '524	+55 '135			9	-45 '553	+ 7 '060			
9	+46 '310	-36 '643			12	-64 '389	+32 '153			10	-55 '432	+ 5 '106			11	-45 '480	+43 '178			
9	+47 '759	-42 '834			15	-64 '344	+ 1 '117	65 1815	9 '9	36	-55 '258	+ 1 '006	65 1820	7 '3	9	-45 '325	+35 '067			
9	+49 '094	-15 '816			9	-64 '226	+57 '468			9	-55 '061	+10 '263			15	-45 '290	+23 '704			
9	+49 '611	-48 '134			32	-64 '083	+55 '643	64 1823	8 '2	10	-54 '506	+11 '392			9	-44 '987	+22 '233			
12	+49 '811	-52 '698	66 1718	9 '4	9	-64 '082	+10 '561			10	-54 '491	+63 '448			10	-44 '932	+15 '148			
9	+49 '889	- 1 '414			9	-63 '122	+12 '044			10	-54 '413	+44 '458			10	-44 '678	+ 6 '693			
9	+50 '192	- 9 '285			10	-62 '882	+63 '773			9	-54 '114	+23 '971			9	-44 '571	+34 '178			
9	+51 '134	-14 '696			9	-62 '787	+36 '341			15	-54 '087	+ 6 '195			14	-44 '271	+59 '123			
	301					11					61					121				
15	+51 '171	-20 '888	66 1719	9 '3	9	-62 '426	+56 '989			14	-53 '684	+ 9 '112			15	-43 '672	+21 '375			
12	+52 '017	-18 '179	66 1720	9 '9	10	-62 '383	+ 0 '070			12	-53 '563	+34 '049			42	-43 '543	+63 '236	64 1839	7 '3	
9	+52 '972	-11 '437			15	-62 '299	+24 '139			10	-53 '312	+ 6 '597			10	-43 '156	+20 '750			
17	+53 '218	-20 '984	66 1721	9 '2	10	-61 '635	+43 '688			19	-53 '303	+32 '623	65 1823	9 '2	9	-43 '103	+56 '259			
10	+54 '203	- 0 '645			10	-61 '623	+54 '344			15	-53 '183	+ 3 '785			18	-42 '890	+27 '918	65 1829	9 '3	
9	+54 '439	-15 '665			9	-61 '513	+20 '741			9	-52 '921	+56 '899			15	-42 '591	+37 '154			
14	+54 '830	-43 '000	66 1722	9 '2	11	-61 '295	+46 '636			15	-52 '914	+47 '471			9	-42 '546	+45 '100			
42	+54 '996	- 0 '581	65 1819	7 '2	10	-61 '290	+33 '837			9	-52 '867	+59 '462			15	-41 '821	+17 '543			
9	+55 '053	-40 '435			10	-61 '198	+27 '431			9	-52 '840	+11 '042			10	-41 '779	+52 '225			
9	+56 '484	-10 '983			9	-61 '067	+52 '924			9	-52 '358	+13 '585			9	-41 '767	+30 '725			
	311					21					71					131				
13	+57 '349	- 8 '310	65 1822	9 '4	9	-61 '000	+19 '614			9	-52 '309	+23 '405			9	-41 '698	+11 '582			
9	+57 '785	-64 '053	66 1725	9 '9	9	-60 '527	+39 '125			10	-52 '277	+51 '297			11	-41 '593	+55 '573			
14	+58 '286	-23 '813	66 1724	9 '3	10	-60 '507	+ 1 '024			9	-52 '231	+22 '974			11	-41 '592	+ 9 '081			
9	+60 '390	-42 '567	66 1726	9 '9	11	-60 '426	+49 '546			9	-52 '064	+11 '582			10	-41 '566	+ 9 '224			
14	+61 '579	-51 '167	66 1728	9 '0	14	-60 '299	+23 '790			9	-51 '990	+40 '904			10	-41 '450	+ 8 '117			
9	+61 '778	-45 '186			9	-60 '050	+31 '353			9	-51 '868	+36 '235			15	-41 '428	+ 4 '577			
9	+62 '094	-60 '245			9	-59 '593	+42 '525			15	-51 '266	+46 '128	65 1825	9 '9	9	-41 '263	+56 '389			
11	+62 '207	-12 '140	66 1727	9 '8	9	-59 '560	+47 '378			16	-51 '107	+15 '057	65 1824	9 '9	9	-41 '219	+41 '502			
9	+63 '115	-13 '441			9	-59 '479	+17 '807			10	-51 '058	+39 '791			9	-41 '215	+42 '570			
13	+64 '665	-59 '188	66 1729	9 '1	9	-59 '338	+17 '295			22	-50 '905	+50 '825	65 1826	8 '8	12	-40 '993	+19 '975			
						31					81					141				
					20	-59 '139	+31 '631	65 1816	9 '4	9	-50 '480	+49 '030			9	-40 '842	+44 '338			
					9	-58 '858	+60 '934			9	-50 '451	+26 '530			18	-40 '733	+34 '375	65 1830	9 '9	
					9	-58 '786	+ 8 '665			15	-50 '398	+10 '916			9	-40 '700	+ 6 '951			
					9	-58 '503	+25 '558			11	-50 '363	+33 '153			9	-40 '632	+21 '255			
					9	-58 '129	+34 '122			9	-50 '286	+49 '076			9	-40 '620	+19 '343			
					15	-58 '073	+ 5 '305			9	-50 '034	+32 '174			68	-40 '258	+51 '948	64 1844	6 '4	
					9	-57 '936	+57 '923			9	-49 '919	+12 '245			16	-39 '980	+64 '960	64 1847	9 '8	
					9	-57 '700	+12 '925			10	-49 '884	+50 '203			10	-39 '858	+37 '193			
					15	-57 '534	+23 '554	65 1817	9 '9	11	-49 '833	+17 '178			9	-39 '737	+24 '618			
					12	-57 '427	+29 '052			9	-49 '410	+21 '524			9	-39 '615	+18 '343			
						41					91					151				
					11	-57 '315	+ 1 '279			9	-49 '226	+52 '254			9	-39 '614	+53 '738			
					11	-57 '283	+24 '385			9	-48 '478	+27 '080			9	-39 '591	+30 '825			
					17	-57 '228	+24 '111	65 1818	9 '5	9	-48 '391	+27 '448			17	-39 '587	+58 '644	64 1848	9 '9	
					9	-57 '122	+ 9 '339			9	-47 '992	+62 '724			9	-39 '532	+63 '114			
					14	-57 '119	+ 5 '010			9	-47 '868	+13 '680			9	-39 '501	+ 9 '643			
					10	-56 '450	+40 '586			9	-47 '777	+11 '582			19	-39 '342	+43 '152	65 1832	9 '9	
					9	-56 '340	+22 '745			20	-47 '615	+48 '869	65 1827	9 '4	10	-39 '190	+61 '268			
					21	-56 '266	+31 '438	65 1821	9 '2	9	-47 '585	+29 '050			9	-38 '514	+18 '937			
					10	-56 '114	+21 '209			15	-47 '464	+22 '906			18	-38 '491	+50 '086	65 1833	9 '6	
					9	-56 '102	+30 '703			10	-47 '386	+63 '370			10	-38 '259	+58 '713			
											101					161				
					11	-57 '315	+ 1 '279			10	-47 '330	+63 '357			9	-38 '189	+52 '260			
					11	-57 '283	+24 '385			36	-46 '392	+53 '279	64 1837	7 '9	12	-38 '170	+49 '075			
					17	-57 '228	+24 '111	65 1818	9 '5	9	-46 '380	+23 '964			9	-37 '868	+41 '990			
					9	-57 '122	+ 9 '339			9	-46 '327	+27 '504			9	-37 '794	+38 '575			
					14	-57 '119	+ 5 '010			9	-46 '258	+23 '806			9	-37 '660	+37 '328			
					10	-56 '450	+40 '586			11	-46 '240	+ 3 '254			14	-37 '484	+37 '577			
					9	-56 '340	+22 '745			9	-46 '196	+ 3 '303			10	-37 '045	+54 '876			
					21	-56 '266	+31 '438	65 1821	9 '2	19	-46 '081	+44 '580	65 1828	9 '8	9	-37 '010	+31 '306			
					10	-56 '114	+21 '209			9	-45 '960	+55 '971			9	-36 '880	+22 '005			
					9	-56 '102	+30 '703			16	-45 '953	+28 '502			15	-36 '875	+55 '177			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171,					231,					291,					351,			
12	-36'711	+ 8'852			11	-27'580	+64'800			9	-20'336	+49'390			16	-13'137	+51'243		
15	-36'568	+39'251			20	-27'414	+29'096	65 1837	9'2	9	-20'287	+40'983			15	-13'019	+46'038		
9	-36'539	+33'216			15	-27'332	+25'456			18	-19'953	+12'598	65 1840	9'4	9	-12'812	+21'418		
9	-36'484	+61'168			10	-27'317	+16'526			9	-19'888	+55'342			9	-12'539	+ 0'258		
9	-36'200	+30'166			9	-27'242	+25'590			28	-19'868	+16'426	65 1841	8'6	9	-12'531	+52'209		
10	-36'173	+27'949			9	-27'120	+47'466			9	-19'757	+ 1'499			9	-12'488	+55'547		
10	-36'167	+18'241			16	-27'010	+58'723			9	-19'589	+11'409			16	-12'272	+28'156	65 1847	9'9
10	-36'115	+32'249			10	-26'734	+50'953			10	-19'567	+32'385			18	-11'959	+16'057	65 1848	9'6
9	-35'877	+50'455			10	-26'692	+55'508			9	-19'235	+62'627			9	-11'621	+56'577		
9	-35'586	+59'177			12	-26'469	+34'450			14	-19'205	+30'419			9	-11'386	+ 6'506		
	181					241					301					361			
10	-35'566	+29'863			25	-26'310	+44'098	65 1838	8'8	9	-19'199	+56'127			9	-11'332	+47'878		
9	-35'545	+53'052			9	-26'180	+ 4'765			52	-19'139	+43'205	65 1842	6'4	15	-11'271	+56'540	64 1875	9'9
9	-35'495	+52'778			10	-26'148	+21'935			10	-19'087	+17'310			10	-11'050	+58'112		
10	-35'437	+27'939			9	-26'125	+17'389			11	-19'057	+35'253			9	-10'675	+48'118		
9	-34'992	+25'636			9	-25'679	+55'393			20	-18'971	+44'952	65 1844	9'0	10	- 9'909	+64'974		
9	-34'974	+53'869			15	-25'519	+56'157			9	-18'946	+52'567			10	- 9'822	+14'978		
9	-34'655	+48'606			10	-25'469	+35'567			9	-18'834	+22'604			16	- 9'627	+43'642		
9	-34'587	+31'055			9	-25'444	+20'678			12	-18'829	+16'211			9	- 9'053	+48'735		
9	-34'201	+63'308			10	-25'443	+52'077			19	-18'746	+54'953	64 1868	9'6	15	- 9'013	+40'996		
24	-33'621	+53'909	64 1852	8'8	11	-25'324	+63'417			24	-18'719	+14'929	65 1843	8'8	12	- 8'991	+ 1'694		
	191					251					311					371			
9	-33'304	+35'591			16	-25'105	+29'366			9	-18'711	+38'373			11	- 8'765	+54'332		
17	-33'136	+29'125			9	-25'066	+59'758			10	-18'678	+51'275			10	- 8'716	+17'783		
9	-32'975	+53'898			14	-24'802	+32'204			11	-18'505	+58'550			10	- 8'349	+52'060		
9	-32'878	+14'740			9	-24'788	+54'299			18	-18'370	+ 2'705	65 1845	9'9	9	- 8'162	+15'865		
9	-32'763	+37'284			9	-24'777	+43'410			18	-18'211	+56'882	64 1869	9'5	11	- 7'880	+31'457		
9	-32'557	+24'281			9	-24'731	+64'509			9	-18'113	+59'026			10	- 7'828	+52'071		
10	-32'533	+45'723			15	-24'511	+48'177			10	-18'012	+ 8'687			40	- 7'663	+57'490	64 1879	7'7
10	-32'499	+34'802			10	-24'497	+18'362			10	-17'990	+38'773			26	- 7'531	+52'489	64 1881	8'4
9	-32'439	+37'828			9	-24'123	+41'321			10	-17'973	+55'448			16	- 7'437	+47'768		
9	-32'417	+52'942			9	-24'116	+34'392			9	-17'946	+17'294			18	- 7'276	+54'023	64 1882	9'9
	201					261					321					381			
9	-32'232	+19'798			9	-24'020	+56'303			15	-17'754	+52'524			9	- 6'778	+24'631		
10	-32'066	+32'039			9	-23'732	+49'865			15	-17'605	+ 3'225			9	- 6'419	+47'693		
10	-31'901	+21'514			9	-23'609	+13'710			11	-17'354	+19'372			12	- 6'122	+39'303		
9	-31'784	+58'735			15	-23'536	+23'280			9	-16'998	+54'488			13	- 5'968	+37'750		
11	-31'611	+49'052			11	-23'524	+15'472			13	-16'857	+31'579			15	- 5'928	+18'049		
9	-30'880	+40'852			10	-23'356	+49'377			15	-16'585	+16'170			15	- 4'847	+61'753		
10	-30'696	+37'019			9	-23'039	+44'608			11	-16'562	+ 2'365			9	- 4'633	+46'604		
9	-30'290	+33'863			10	-22'970	+30'496			15	-16'496	+24'534			12	- 4'534	+19'714		
10	-30'276	+ 2'454			11	-22'956	+36'087			15	-16'396	+21'727			9	- 4'344	+48'004		
9	-30'275	+29'822			9	-22'878	+60'082			9	-16'372	+29'910			10	- 4'284	+51'005		
	211					271					331					391			
15	-30'168	+11'528			9	-22'609	+ 8'252			9	-16'271	+53'695			9	- 4'132	+19'185		
15	-30'041	+61'818			9	-22'543	+17'654			9	-16'211	+40'257			18	- 3'685	+32'850	65 1850	9'9
10	-29'908	+53'437			11	-22'425	+50'375			9	-16'190	+55'684			9	- 3'656	+55'893		
9	-29'576	+25'176			9	-22'378	+63'996			9	-16'101	+54'094			9	- 3'645	+59'345		
9	-29'555	+27'420			10	-22'322	+51'394			9	-15'992	+49'146			10	- 3'331	+52'032		
9	-29'253	+58'805			11	-22'224	+58'431			9	-15'804	+45'267			9	- 3'308	+48'876		
12	-29'184	+ 2'938			11	-22'158	+63'902			9	-15'670	+46'754			18	- 3'037	+43'446	65 1851	9'5
9	-29'039	+38'225			19	-22'063	+ 2'746	65 1839	9'5	9	-15'399	+57'899			9	- 2'429	+43'502		
9	-29'011	+ 6'482			9	-22'057	+18'675			15	-15'360	+46'723			11	- 2'355	+10'969		
24	-29'002	+ 1'890	65 1834	8'5	9	-21'927	+62'837			9	-15'337	+46'086			10	- 2'350	+58'463		
	221					281					341					401			
24	-28'632	+47'247	65 1835	8'9	10	-21'658	+12'525			11	-15'174	+55'582			9	- 2'190	+54'265		
11	-28'620	+29'976			11	-21'589	+43'558			10	-15'073	+40'339			20	- 2'059	+27'974	65 1852	8'8
9	-28'503	+35'379			9	-21'288	+59'563			30	-14'919	+43'672	65 1846	8'3	12	- 1'934	+ 2'703		
9	-28'441	+56'827			12	-21'189	+44'472			16	-14'580	+12'841			12	- 1'893	+ 4'354		
15	-28'350	+36'766			9	-20'941	+50'509			9	-14'290	+56'999			19	- 1'345	+ 0'611	65 1853	9'7
10	-28'266	+54'725			9	-20'924	+54'252			12	-14'263	+53'415			9	- 0'960	+51'999		
11	-28'189	+31'724			10	-20'818	+12'887			9	-14'100	+31'771			9	- 0'332	+57'328		
9	-28'023	+61'589			11	-20'811	+41'480			11	-14'020	+53'069			15	- 0'275	+56'710		
9	-27'951	+33'826			10	-20'767	+55'669			9	-13'724	+33'775			15	+ 0'001	+44'778		
11	-27'643	+35'370			9	-20'713	+59'911			9	-13'519	+53'249			19	+ 0'065	+42'288	65 1855	9'2

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
411			65 1856	9 9	471			64 1903	8 8	531			65 1871	9 1	591			65 1884	9 8
10	+ 0 193	+14 018			15	+ 9 448	+51 442			10	+20 752	+60 473			11	+40 380	+10 856		
15	+ 0 225	+45 331			22	+ 9 628	+52 558			9	+20 891	+61 019			10	+40 452	+60 037		
18	+ 0 273	+38 848			9	+ 9 688	+60 071			10	+21 182	+13 148			9	+40 676	+18 307		
9	+ 0 391	+36 779			9	+ 9 907	+47 712			19	+21 366	+44 393			12	+40 993	+16 149		
10	+ 0 429	+42 454			9	+ 9 938	+55 751			9	+21 431	+59 479			13	+41 534	+47 654		
421			65 1857	9 3	481			65 1861	9 9	541			65 1872	9 6	601			65 1885	9 6
9	+ 0 551	+24 123			19	+10 156	+14 146			9	+21 484	+35 956			9	+41 845	+38 577		
9	+ 0 781	+15 399			9	+10 211	+53 577			9	+21 503	+22 003			10	+41 912	+15 486		
10	+ 0 900	+54 738			9	+10 482	+59 101			10	+21 809	+24 389			16	+42 075	+ 9 007		
9	+ 1 112	+54 440			11	+10 530	+39 716			16	+22 376	+36 502			19	+42 270	+11 322		
19	+ 1 280	+51 230			9	+10 639	+53 547			30	+22 466	+32 290			9	+42 963	+36 063		
431			65 1858	9 0	491			65 1862	7 1	551			65 1873	8 7	611			65 1886	9 5
9	+ 1 010	+60 915			11	+10 796	+43 295			20	+22 678	+18 107			10	+43 522	+40 196		
9	+ 1 965	+61 049			40	+10 887	+47 761			9	+22 858	+13 358			9	+43 618	+16 955		
15	+ 2 292	+42 808			9	+10 903	+44 120			9	+22 920	+51 687			12	+43 763	+ 7 435		
13	+ 2 372	+34 218			12	+11 412	+16 806			9	+23 167	+ 7 725			9	+44 431	+31 859		
9	+ 2 631	+41 968			15	+11 479	+54 973			15	+23 244	+15 020			9	+44 497	+31 066		
441			65 1858	9 0	491			65 1863	9 3	551			65 1877	9 7	611			65 1887	9 3
9	+ 3 040	+63 791			15	+11 571	+33 247			20	+23 341	+ 6 721			9	+45 076	+36 851		
9	+ 3 054	+55 138			10	+11 812	+53 710			9	+23 507	+ 4 156			10	+45 107	+35 710		
10	+ 3 127	+39 147			15	+11 973	+40 747			9	+23 589	+ 3 301			9	+45 172	+11 994		
11	+ 3 134	+ 2 420			18	+12 009	+44 333			9	+23 636	+ 1 896			9	+45 757	+17 512		
22	+ 3 234	+26 781			12	+12 316	+33 148			11	+23 799	+59 641			9	+45 847	+18 567		
451			65 1858	9 0	491			65 1864	9 5	551			65 1878	9 9	611			64 1948	9 5
11	+ 3 315	+44 236			9	+12 577	+10 449			10	+23 873	+44 523			19	+45 862	+ 0 363		
10	+ 3 406	+38 465			9	+12 724	+15 679			15	+24 336	+37 010			10	+46 069	+19 760		
9	+ 3 492	+12 479			10	+12 892	+ 3 502			9	+25 228	+61 609			10	+46 446	+27 021		
9	+ 3 713	+12 408			9	+12 950	+29 220			9	+25 784	+ 7 044			15	+46 609	+63 692		
11	+ 3 959	+26 773			18	+13 207	+37 161			9	+25 961	+37 748			9	+46 785	+ 5 892		
461			65 1858	9 0	491			65 1865	9 9	561			65 1879	10 0	621			64 1950	9 2
9	+ 4 206	+57 731			9	+13 664	+14 599			9	+26 049	+ 8 883			10	+47 019	+43 084		
10	+ 4 312	+34 855			9	+13 974	+29 390			10	+26 767	+19 295			9	+47 083	+ 0 930		
11	+ 4 411	+44 764			18	+14 056	+25 223			9	+26 922	+41 454			13	+47 353	+ 1 728		
12	+ 4 460	+51 247			15	+14 199	+43 759			11	+27 988	+60 755			18	+47 399	+53 726		
9	+ 4 658	+63 227			9	+14 457	+25 267			9	+28 237	+22 169			19	+47 538	+ 9 307		
471			65 1858	9 0	501			65 1866	8 6	561			65 1879	10 0	621			65 1889	9 1
9	+ 4 731	+15 797			22	+14 919	+50 642			15	+28 664	+11 690			9	+47 699	+17 281		
11	+ 5 012	+41 472			9	+14 938	+57 227			9	+28 689	+15 697			10	+49 391	+ 4 483		
9	+ 5 791	+41 101			17	+15 340	+46 982			9	+28 962	+29 928			15	+49 484	+33 665		
12	+ 5 948	+ 1 706			9	+15 390	+30 288			9	+29 338	+25 733			10	+49 550	+30 513		
9	+ 6 236	+52 872			9	+15 423	+32 954			9	+29 949	+12 980			12	+49 672	+12 922		
481			65 1858	9 0	501			65 1867	9 5	571			65 1880	9 4	631			65 1894	9 5
11	+ 6 209	+41 128			9	+15 539	+26 276			10	+30 509	+13 826			18	+49 682	+ 7 981		
9	+ 6 325	+47 233			11	+15 577	+33 197			10	+31 095	+26 191			9	+49 846	+16 660		
10	+ 6 619	+48 658			9	+15 824	+43 955			9	+31 121	+13 197			10	+49 948	+35 202		
9	+ 6 647	+47 489			9	+15 842	+60 700			9	+31 387	+18 621			9	+51 426	+18 158		
12	+ 6 811	+37 448			9	+15 970	+18 063			9	+31 529	+10 811			9	+51 723	+ 3 178		
491			65 1858	9 0	511			65 1868	9 9	571			65 1880	9 4	631			65 1896	9 4
9	+ 6 813	+45 142			10	+16 345	+ 7 819			20	+32 131	+19 197			18	+52 116	+ 6 482		
12	+ 6 874	+47 964			14	+16 497	+28 948			9	+32 192	+22 475			18	+52 173	+ 3 207		
11	+ 7 089	+57 991			9	+16 553	+32 815			10	+32 329	+14 422			9	+52 484	+24 727		
9	+ 7 211	+52 534			15	+17 108	+ 3 429			9	+33 158	+17 057			15	+52 501	+12 433		
13	+ 7 652	+60 209			9	+17 282	+41 204			11	+33 589	+18 385			11	+53 127	+ 2 639		
501			65 1858	9 0	511			64 1913	9 6	581			65 1881	9 7	641			64 1955	9 6
12	+ 7 729	+61 076			11	+17 289	+ 6 570			9	+34 074	+17 225			9	+53 626	+15 988		
9	+ 7 788	+58 231			15	+17 292	+60 055			9	+35 268	+ 2 264			9	+54 012	+28 099		
12	+ 7 889	+41 301			13	+17 744	+59 580			15	+36 173	+14 895			9	+54 135	+27 609		
19	+ 7 932	+54 972			9	+17 969	+ 1 279			9	+36 294	+15 039			12	+54 629	+60 407		
24	+ 8 125	+42 616			9	+18 586	+17 584			9	+36 511	+64 812			12	+54 633	+ 4 653		
521			65 1860	9 1	521			65 1869	9 6	581			65 1883	9 8	641			65 1900	9 2
12	+ 8 248	+49 336			9	+18 989	+43 097			10	+36 598	+24 421			9	+55 315	+23 787		
9	+ 8 277	+58 787			9	+19 232	+ 0 818			9	+36 806	+60 068			9	+55 448	+15 254		
10	+ 8 608	+37 662			10	+19 407	+ 5 028			9	+36 941	+10 906			9	+55 738	+ 0 338		
15	+ 8 782	+34 076			10	+19 468	+ 7 373			10	+37 092	+18 653			9	+56 047	+20 785		
19	+ 8 834	+32 122			12	+19 611	+12 387			9	+37 207	+11 952			19	+56 497	+ 9 630		
531			65 1860	9 1	521			65 1870	10 0	581			65 1883	9 8	641			65 1901	9 2
9	+ 8 888	+16 968			9	+20 179	+51 257			10	+37 635	+35 710			22	+56 927	+18 947		
13	+ 8 949	+48 772			10	+20 201	+33 754			9	+37 930	+56 584			10	+57 246	+63 612		
15	+ 8 950	+52 807			9	+20 405	+52 750			15	+39 706	+16 407			9	+57 430	+ 0 123		
9	+ 9 123	+61 067			15	+20 431	+23 729			12	+39 759	+ 0 916			9	+58 259	+41 248		
10	+ 9 228	+63 206			11	+20 737	+23 861			9	+40 266	+10 880			9	+58 517	+ 1 345		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	651					711					771					831			
9	+58'686	+3'657			20	-56'401	-20'979	66 1721	9'2	9	-45'528	-26'772			9	-35'688	-21'297		
9	+58'702	+45'985			10	-56'182	-17'701			9	-45'027	-14'482			9	-35'640	-9'507		
16	+58'737	+18'022	65 1904	9'6	40	-56'117	-0'497	65 1819	7'2	9	-44'918	-42'107			18	-35'611	-46'379	66 1731	9'9
14	+58'798	+50'548	65 1902	9'6	9	-55'904	-11'721			14	-44'721	-59'488			9	-35'545	-25'960		
9	+60'111	+36'457			9	-55'826	-3'646			9	-44'349	-8'533			14	-35'530	-27'678		
9	+60'467	+3'205			12	-55'557	-15'584			10	-43'753	-9'506			22	-35'466	-25'404	66 1732	8'8
9	+61'309	+30'368			9	-55'502	-49'498			15	-43'528	-13'079			9	-35'466	-7'301		
36	+61'456	+25'227	65 1905	8'0	9	-55'433	-20'919			11	-43'257	-24'159			17	-35'358	-34'247		
10	+61'550	+15'626			15	-54'548	-19'514			12	-43'205	-52'033			11	-35'216	-21'469		
10	+61'936	+22'505			9	-54'482	-29'006			9	-42'821	-40'847			16	-34'516	-7'006		
	661					721					781					841			
9	+62'198	+0'881			11	-54'412	-64'533			9	-42'525	-44'241			9	-34'438	-37'385		
14	+62'576	+53'255	64 1960	9'5	9	-53'924	-52'093			16	-42'528	-16'650			9	-34'400	-59'223		
12	+62'785	+50'556	65 1906	9'5	9	-53'405	-9'061			9	-42'248	-45'789			11	-34'152	-53'295		
9	+62'994	+24'555			15	-53'369	-10'767			22	-42'238	-58'234	66 1729	9'1	9	-34'150	-10'054		
9	+63'524	+41'375			10	-53'323	-28'008			9	-41'949	-53'723			9	-34'075	-19'719		
9	+63'535	+41'879			16	-53'211	-42'818	66 1722	9'2	9	-41'890	-16'201			9	-34'055	-41'448		
9	+63'963	+33'885			21	-53'205	-8'028	65 1822	9'4	13	-41'669	-39'388			10	-33'894	-10'134		
9	+64'836	+9'108			11	-53'149	-40'262			11	-41'645	-46'623			16	-33'842	-28'864		
9	-64'936	-32'630			10	-53'099	-9'783			9	-41'642	-43'567			10	-33'096	-8'419		
9	-64'707	-45'179			11	-53'049	-10'902			11	-40'784	-25'756			10	-32'998	-55'446		
	671					731					791					851			
9	-64'237	-45'737			10	-52'410	-47'418			16	-40'744	-6'548			9	-32'955	-51'589		
9	-64'119	-3'901			9	-52'310	-7'974			9	-40'689	-26'086			9	-32'733	-28'814		
10	-63'866	-5'085			9	-52'076	-4'180			10	-40'218	-61'938			10	-32'691	-24'001		
9	-63'840	-40'062			12	-51'911	-9'075			9	-40'181	-51'196			16	-32'542	-3'022		
12	-63'596	-24'477			11	-51'671	-9'803			13	-40'104	-49'353			9	-32'522	-9'918		
10	-63'407	-1'243			10	-51'618	-46'710			9	-39'759	-12'210			9	-32'294	-36'371		
9	-62'972	-9'024			9	-51'509	-46'966			9	-39'708	-18'148			11	-32'289	-10'370		
11	-62'482	-22'136			9	-51'453	-24'477			9	-39'686	-20'937			11	-32'151	-25'695		
10	-62'160	-37'089			10	-54'439	-14'240			10	-39'579	-39'050			14	-31'243	-33'519		
9	-62'027	-25'229			11	-51'330	-17'266			9	-39'548	-51'068			12	-31'243	-27'400		
	681					741					801					861			
9	-61'721	-2'488			10	-51'153	-44'233			11	-39'369	-48'407			9	-31'243	-27'460		
9	-61'500	-10'854			19	-51'149	-23'427	66 1724	9'3	17	-39'088	-6'239	65 1831	9'9	16	-31'112	-6'916		
15	-61'143	-1'705			10	-50'863	-25'678			9	-39'078	-17'344			19	-31'109	-43'467	66 1734	9'4
12	-60'879	-16'110			10	-50'840	-45'762			9	-38'818	-1'623			10	-31'082	-42'898		
10	-60'669	-42'698			9	-50'710	-1'206			9	-38'743	-28'661			12	-30'870	-20'063		
9	-60'624	-63'409			12	-49'334	-15'888			17	-38'681	-25'088			16	-30'640	-3'262		
9	-60'556	-6'057			9	-49'214	-43'199			9	-38'576	-31'057			15	-30'630	-27'608		
10	-60'270	-43'173			9	-49'094	-61'983			9	-38'497	-62'773			14	-30'461	-40'939		
14	-60'268	-9'517			15	-48'737	-63'577	66 1725	9'9	10	-37'949	-55'082			15	-30'376	-31'739		
10	-59'912	-32'219			9	-48'725	-22'003			10	-37'900	-19'241			12	-30'310	-43'723		
	691					751					811					871			
9	-59'577	-50'148			9	-48'584	-9'379			11	-37'802	-6'324			14	-30'048	-45'569		
9	-59'356	-15'235			10	-48'277	-30'423			11	-37'569	-27'398			16	-29'880	-42'865		
9	-58'947	-12'336			11	-48'180	-25'128			9	-37'520	-29'366			9	-29'826	-9'623		
15	-58'931	-14'840			17	-48'060	-11'499	66 1727	9'8	9	-37'399	-54'068			9	-29'784	-11'136		
9	-58'763	-26'792			11	-47'804	-12'052			17	-37'296	-17'300			9	-29'783	-37'672		
20	-58'452	-21'035	66 1719	9'3	16	-47'693	-41'977	66 1726	9'9	9	-37'268	-18'885			9	-29'676	-10'882		
9	-58'146	-24'245			9	-47'471	-30'715			11	-37'136	-31'041			9	-29'565	-50'703		
9	-58'094	-24'439			15	-47'353	-4'850			15	-37'082	-29'395			11	-29'390	-24'921		
12	-58'008	-48'310			9	-47'184	-38'784			12	-36'991	-28'962			10	-28'851	-49'806		
9	-57'814	-12'732			9	-47'110	-13'042			12	-36'964	-4'582			13	-28'752	-21'697		
	701					761					821					881			
18	-57'792	-18'262	66 1720	9'9	12	-47'074	-12'727			18	-36'916	-49'207	66 1730	9'6	11	-28'718	-29'550		
9	-57'588	-12'400			9	-46'844	-30'871			9	-36'679	-42'363			9	-28'545	-38'045		
20	-57'530	-52'850	66 1718	9'4	12	-46'800	-15'871			10	-36'506	-16'499			10	-28'456	-45'654		
11	-57'490	-9'583			10	-46'765	-21'746			13	-36'218	-31'976			10	-28'454	-32'357		
10	-57'326	-7'117			9	-46'602	-38'697			9	-36'207	-10'113			9	-28'103	-24'277		
14	-57'323	-11'462			12	-46'425	-55'348			9	-36'035	-21'413			9	-27'946	-44'589		
9	-57'019	-0'580			16	-46'125	-44'479			9	-36'028	-51'202			9	-27'882	-46'172		
16	-56'893	-0'620			10	-46'053	-17'686			13	-36'027	-9'505			9	-27'820	-32'317		
10	-56'774	-7'975			22	-45'907	-50'475	66 1728	9'0	10	-35'972	-8'355			9	-27'815	-9'739		
9	-56'501	-29'974			10	-45'595	-17'600			9	-35'740	-6'761			9	-27'597	-8'092		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	891					891					1011					1071			
11	-27°415	-50°451	65 1836	8°5	16	-19°742	-26°105			9	-10°183	-2°943			9	+2°456	-11°139		
9	-27°133	-45°601			9	-19°693	-25°767			16	-9°748	-8°458			9	+2°528	-35°089		
24	-27°062	-6°463			16	-19°657	-12°025			11	-9°224	-34°405			10	+3°214	-10°890		
10	-27°007	-57°135			11	-19°399	-25°037			9	-9°159	-2°349			9	+3°958	-45°367		
13	-26°617	-1°745			9	-19°322	-31°456			9	-9°091	-50°767			9	+4°145	-6°071		
11	-26°202	-48°563			11	-19°034	-53°171			9	-8°952	-32°255			11	+4°209	-3°817		
9	-25°790	-49°409			17	-19°024	-4°861			10	-8°826	-28°157			9	+4°369	-24°124		
9	-25°784	-27°442			9	-18°929	-28°598			9	-8°792	-5°575			17	+4°547	-60°176	66 1754	9°9
11	-25°783	-36°419			11	-18°750	-7°918			12	-8°683	-19°180			22	+4°624	-30°669	66 1755	8°7
10	-25°703	-55°221			11	-18°598	-4°615			9	-8°680	-60°472			10	+5°025	-26°518		
	901					961					1021					1081			
9	-25°378	-30°741			9	-18°512	-22°636			16	-8°674	-7°466			18	+5°267	-58°045	66 1756	9°9
14	-25°374	-45°250			10	-18°471	-59°702			9	-8°581	-36°791			16	+5°415	-29°062		
14	-25°320	-60°120			9	-18°396	-56°480			60	-8°569	-58°686	66 1747	5°5	12	+5°749	-63°316		
9	-25°238	-42°661			9	-18°361	-43°104			12	-8°143	-59°022			9	+5°885	-28°512		
11	-25°232	-33°659			9	-18°172	-7°503			9	-7°830	-60°903			12	+6°246	-60°563		
15	-25°086	-40°636			11	-18°106	-37°963			9	-7°715	-56°440			9	+6°268	-25°802		
10	-25°081	-58°069			11	-18°072	-5°082			20	-7°712	-43°397	66 1748	8°8	9	+6°616	-54°965		
9	-25°031	-43°647			16	-17°925	-31°656			10	-7°550	-20°415			9	+7°019	-57°523		
9	-24°799	-18°879			9	-17°785	-22°198			11	-7°453	-12°252			15	+7°481	-27°158		
9	-24°498	-49°646			12	-17°668	-15°074			9	-7°285	-21°008			11	+7°757	-4°312		
	911					971					1031					1091			
9	-24°476	-60°930			9	-17°657	-34°747			9	-6°830	-25°998			16	+7°854	-6°809		
12	-24°433	-22°094			11	-17°425	-29°807			17	-6°398	-0°101	65 1819	9°9	16	+8°193	-27°368		
10	-24°394	-10°806			9	-17°280	-9°198			9	-5°962	-6°761			9	+8°372	-54°194		
9	-24°344	-36°489			9	-16°992	-12°030			11	-5°434	-8°186			13	+8°565	-20°812		
16	-24°288	-50°313			11	-16°747	-53°770			19	-5°222	-20°556	66 1749	9°6	9	+8°634	-16°915		
9	-24°198	-12°548			11	-16°710	-6°417			17	-5°045	-53°816			9	+8°892	-14°804		
9	-23°893	-30°613			16	-16°626	-36°549			17	-5°039	-58°388	66 1750	9°9	18	+8°949	-31°331	66 1758	9°0
19	-23°510	-58°853	66 1735	9°4	17	-16°611	-13°828	66 1741	9°9	11	-5°004	-21°101			9	+9°014	-35°693		
11	-23°310	-56°459			11	-16°551	-13°877	66 1739	9°7	9	-4°737	-26°347			16	+9°351	-19°479		
9	-23°288	-51°606			20	-16°539	-60°031	66 1739	9°7	19	-4°540	-45°292	66 1751	9°2	9	+10°809	-31°093		
	921					981					1041					1101			
9	-23°244	-47°840			20	-16°446	-56°687	66 1740	8°8	10	-4°295	-40°297			9	+11°362	-4°775		
9	-23°066	-40°376			9	-16°234	-42°574			11	-4°129	-11°432			15	+11°387	-42°541		
11	-22°819	-21°946			16	-16°145	-54°846			14	-4°098	-60°715			10	+11°708	-36°863		
10	-22°652	-12°314			23	-15°948	-59°674	66 1742	8°8	9	-3°830	-40°588			11	+12°165	-18°883		
9	-22°477	-60°996			9	-15°572	-15°120			9	-3°410	-31°833			9	+12°171	-31°160		
12	-22°348	-12°840			17	-15°556	-19°484			9	-3°031	-33°647			12	+12°385	-26°439		
10	-22°067	-26°848			9	-15°502	-20°163			9	-2°908	-37°953			12	+12°458	-46°888		
15	-22°006	-41°384			19	-15°460	-57°886	66 1743	9°1	16	-2°663	-41°358			11	+12°478	-39°421		
20	-21°860	-27°642	66 1736	9°2	15	-15°278	-55°457			15	-2°346	-45°552			9	+12°858	-32°503		
12	-21°805	-44°072			9	-14°936	-27°155			10	-2°317	-19°585			11	+14°010	-23°971		
	931					991					1051					1111			
13	-21°771	-36°557			10	-14°737	-2°088			11	-2°248	-39°605			11	+14°405	-32°195		
9	-21°743	-21°903			9	-14°686	-35°703			9	-2°202	-37°982			11	+14°553	-17°942		
9	-21°698	-14°306			17	-14°658	-34°101	66 1744	9°9	10	-2°137	-10°104			15	+14°753	-62°375	66 1759	9°8
15	-21°535	-21°910			11	-14°299	-50°427			9	-2°124	-48°785			9	+14°951	-8°323		
16	-21°514	-13°042			9	-14°288	-35°832			10	-1°826	-20°623			10	+15°044	-6°119		
12	-21°512	-27°246			11	-14°205	-54°983			9	-1°177	-32°031			10	+15°299	-39°414		
9	-21°437	-49°632			22	-13°921	-64°882	66 1745	9°2	9	-0°648	-15°821			15	+15°581	-51°527	66 1760	10°0
11	-21°197	-36°201			9	-13°827	-53°726			9	-0°592	-15°519			17	+15°681	-50°149	66 1761	9°6
10	-21°012	-28°703			9	-13°637	-15°168			11	-0°555	-26°819			9	+15°973	-38°964		
16	-20°665	-36°909			10	-13°428	-25°489			21	-0°436	-7°323	65 1854	9°2	13	+16°478	-49°833	66 1762	10°0
	941					1001					1061					1121			
9	-20°664	-45°650			16	-13°393	-37°975	66 1746	9°9	12	-0°220	-3°802			9	+16°480	-4°951		
19	-20°528	-28°922	66 1737	9°4	9	-13°059	-23°714			11	+0°048	-59°771			12	+17°784	-48°141	66 1763	10°0
10	-20°442	-29°006			9	-12°640	-21°723			9	+0°246	-0°884			9	+18°185	-56°747		
9	-20°243	-59°103			9	-12°363	-1°033			14	+0°621	-5°287			9	+18°237	-14°791		
9	-20°125	-59°414			9	-11°857	-38°857			9	+0°635	-38°725			9	+18°579	-18°264		
18	-20°105	-39°758	66 1738	9°9	12	-11°799	-43°680			9	+0°797	-42°404			15	+19°572	-23°923	66 1764	10°0
16	-20°084	-29°606			16	-11°398	-34°839			10	+0°933	-64°244			11	+19°644	-32°415		
16	-20°029	-51°933			14	-11°291	-57°686			9	+1°183	-56°547			9	+19°865	-6°555		
11	-19°984	-8°854			15	-11°203	-8°612			20	+1°528	-18°075	66 1753	9°1	10	+20°256	-17°233		
9	-19°766	-20°848			13	-10°868	-29°255			9	+1°918	-8°441			10	+20°719	-39°957		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1131,					1191,					1251,					1311,			
10	+20 '728	-25 '203			18	+30 '525	-27 '813	66 1777	9 '2	13	+43 '570	-20 '805	66 1791	10 '0	15	+55 '430	-3 '829	65 1899	10 '0
9	+21 '043	-18 '299			9	+31 '812	-20 '400			11	+43 '701	-31 '552			9	+56 '077	-9 '237		
11	+21 '101	-55 '770			9	+31 '911	-49 '961			16	+43 '810	-37 '688	66 1793	10 '0	9	+56 '439	-9 '777		
17	+21 '265	-37 '929	66 1767	9 '5	10	+31 '950	-22 '127			12	+44 '859	-52 '057	66 1796	10 '0	10	+56 '522	-61 '235	66 1807	10 '0
17	+21 '265	-20 '003	66 1766	9 '4	13	+31 '986	-39 '341			9	+44 '912	-55 '764			9	+56 '584	-36 '744		
18	+21 '296	-12 '993	66 1765	9 '4	9	+32 '023	-47 '492			11	+44 '916	-2 '159			11	+56 '726	-41 '812	66 1806	9 '9
12	+21 '437	-39 '387			9	+32 '243	-37 '799			10	+45 '281	-50 '891			20	+56 '785	-9 '348	65 1903	9 '2
14	+21 '602	-31 '942			9	+32 '393	-3 '967			17	+45 '319	-13 '140	66 1795	9 '6	9	+57 '039	-57 '049		
11	+21 '760	-34 '938			9	+32 '419	-60 '782			10	+45 '709	-28 '944			9	+57 '176	-20 '442		
13	+21 '891	-31 '227			9	+32 '810	-64 '566			11	+46 '032	-42 '100			9	+57 '217	-33 '372		
	1141					1201					1261					1321			
11	+21 '901	-2 '340			18	+32 '816	-21 '533	66 1779	9 '2	10	+46 '153	-27 '423			9	+57 '223	-8 '576		
11	+22 '204	-58 '610			9	+33 '089	-34 '021			11	+46 '255	-8 '610			10	+57 '234	-37 '497		
13	+22 '207	-45 '490	66 1768	10 '0	19	+33 '365	-51 '571	66 1780	9 '3	14	+46 '515	-40 '388	66 1797	10 '0	11	+58 '342	-49 '239	66 1808	10 '0
9	+22 '344	-47 '488			9	+33 '617	-48 '855			10	+46 '702	-42 '898			10	+58 '780	-39 '870		
9	+22 '610	-45 '317			9	+33 '644	-21 '311			11	+46 '830	-44 '564	66 1798	10 '0	9	+59 '170	-21 '796		
9	+22 '658	-30 '871			12	+33 '759	-3 '027			10	+46 '912	-16 '430			9	+59 '319	-14 '644		
13	+22 '787	-38 '146			9	+33 '776	-17 '324			16	+47 '096	-3 '877	65 1888	9 '7	9	+59 '506	-34 '322		
10	+22 '896	-64 '676			9	+33 '817	-1 '002			10	+47 '201	-49 '766			9	+59 '579	-20 '596		
16	+23 '084	-7 '091	65 1876	9 '8	11	+33 '937	-9 '381			16	+47 '238	-39 '471	66 1800	9 '7	9	+59 '712	-62 '347		
18	+23 '205	-23 '561	66 1769	9 '9	9	+34 '137	-24 '957			19	+47 '300	-0 '822	65 1890	9 '2	10	+59 '886	-20 '369		
	1151					1211					1271					1331			
19	+23 '399	-24 '087	66 1770	9 '2	9	+34 '297	-25 '462			13	+47 '412	-2 '169			9	+59 '926	-14 '347		
14	+23 '604	-10 '122			9	+34 '373	-10 '211			17	+47 '567	-20 '438	66 1799	9 '5	9	+60 '292	-22 '364		
9	+23 '644	-6 '371			9	+34 '556	-41 '898			11	+47 '735	-2 '716	65 1891	10 '0	11	+60 '432	-4 '410		
10	+24 '010	-52 '939			18	+34 '627	-48 '221	66 1782	9 '5	9	+47 '761	-2 '633			13	+60 '574	-42 '336	66 1809	9 '6
10	+24 '616	-54 '949			16	+34 '659	-13 '663	66 1781	10 '0	11	+47 '790	-17 '293			10	+60 '879	-9 '471		
9	+24 '916	-63 '712			9	+34 '971	-3 '557			10	+47 '793	-8 '183			12	+61 '029	-59 '983	66 1811	9 '2
11	+25 '033	-24 '837			30	+35 '373	-19 '033	66 1783	8 '1	10	+47 '839	-3 '598			9	+61 '388	-21 '074		
9	+25 '112	-27 '602			10	+35 '394	-21 '494			9	+47 '845	-12 '415			10	+61 '493	-17 '773		
9	+25 '482	-45 '435			18	+35 '481	-39 '085	66 1784	9 '4	9	+48 '234	-18 '922			9	+61 '929	-29 '580		
9	+25 '933	-58 '388			9	+35 '527	-32 '287			14	+48 '600	-41 '667	66 1801	9 '7	9	+62 '051	-17 '707		
	1161					1221					1281					1341			
11	+25 '937	-18 '154			9	+35 '676	-46 '078			10	+48 '689	-24 '143			14	+62 '075	-18 '877	66 1810	10 '0
9	+26 '282	-41 '242			16	+36 '250	-9 '625	66 1785	9 '5	9	+49 '330	-38 '497			9	+62 '604	-29 '311		
9	+26 '364	-28 '196			9	+36 '578	-4 '058			11	+49 '702	-31 '049			9	+63 '030	-4 '644		
9	+26 '364	-27 '210			21	+36 '610	-3 '143	65 1882	9 '0	17	+49 '715	-3 '444	65 1895	9 '7	9	+63 '215	-13 '697		
9	+26 '368	-31 '043			9	+36 '666	-25 '193			9	+49 '724	-44 '243			9	+63 '967	-20 '562		
9	+26 '413	-43 '134			9	+37 '037	-50 '756			9	+50 '186	-29 '743			14	+64 '525	-31 '485	66 1813	9 '8
12	+26 '792	-10 '386			10	+37 '371	-30 '235			10	+50 '202	-42 '280			11	+64 '731	-53 '941	66 1814	9 '8
9	+27 '027	-62 '712			10	+37 '609	-44 '972			9	+50 '231	-33 '624			9	+64 '981	-64 '590	66 1816	10 '0
9	+27 '071	-4 '742			10	+37 '904	-27 '554			10	+50 '242	-31 '734							
10	+27 '424	-39 '115			10	+38 '655	-35 '645			9	+50 '321	-33 '680							
	1171					1231					1291								
11	+27 '729	-6 '971			10	+39 '149	-55 '216			10	+50 '366	-6 '473							
9	+27 '778	-52 '879			9	+39 '411	-59 '070			11	+50 '687	-31 '252							
9	+28 '047	-41 '935			9	+39 '618	-9 '503			9	+51 '091	-14 '314							
9	+28 '094	-15 '110			11	+39 '729	-3 '485			9	+51 '098	-45 '730							
10	+28 '440	-12 '700			10	+39 '730	-44 '183			15	+51 '175	-38 '139	66 1804	10 '0					
17	+28 '458	-48 '812	66 1773	9 '6	10	+39 '847	-16 '314			9	+51 '182	-8 '939							
9	+28 '561	-35 '637			9	+40 '204	-31 '442			13	+51 '483	-25 '932	66 1803	10 '0					
11	+28 '567	-43 '547			10	+40 '302	-4 '343			18	+51 '570	-13 '338	66 1802	9 '4					
9	+28 '787	-46 '581			10	+40 '692	-3 '330			10	+51 '950	-33 '022							
17	+28 '891	-43 '332	66 1775	9 '6	11	+40 '983	-33 '578			9	+52 '276	-25 '720							
	1181					1241					1301								
18	+28 '937	-29 '894	66 1774	9 '2	9	+41 '080	-37 '068			9	+52 '371	-17 '793							
9	+29 '250	-23 '505			14	+41 '132	-54 '096	66 1787	9 '7	9	+52 '655	-23 '341							
9	+29 '350	-6 '245			9	+41 '701	-34 '858			10	+52 '860	-45 '740							
11	+29 '382	-48 '151			12	+41 '880	-34 '624	66 1788	10 '0	9	+53 '320	-2 '665							
17	+29 '419	-21 '729	66 1776	9 '5	9	+41 '907	-8 '841			11	+53 '366	-49 '225	66 1805	10 '0					
11	+29 '545	-44 '816			9	+42 '620	-14 '049			10	+53 '682	-54 '638							
10	+29 '649	-22 '602			16	+42 '759	-22 '811	66 1789	9 '8	16	+53 '834	-5 '040							
9	+29 '816	-32 '160			12	+42 '887	-19 '868			9	+54 '391	-17 '919							
11	+29 '895	-0 '527			9	+43 '271	-22 '978			12	+54 '451	-7 '827							
9	+30 '218	-2 '384			14	+43 '504	-45 '580	66 1792	10 '0	9	+54 '625	-21 '240							

C.P.D.					C.P.D.					C.P.D.					C.P.D.									
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.					
PLATE CENTRE. 12 ^h 36 ^m , - 66°. Plate 3291. 1910, April 5. PROVISIONAL CONSTANTS. a = - .01151 d = - .00131 b = + .00130 e = - .01147 c = - .1041 f = + .0360 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51, 9 -47.799 +46.788 9 -47.492 +29.876 9 -46.935 + 9.625 10 -46.529 +36.493 9 -46.018 + 1.072 9 -45.778 + 3.456 9 -45.698 + 8.517 19 -45.573 +35.727 16 -45.350 +33.197 11 -44.495 +21.763 61 11 -42.565 +33.829 15 -41.726 +36.458 15 -41.180 + 2.388 9 -41.039 +14.342 9 -40.987 +19.773 9 -40.434 + 6.060 10 -40.334 +16.613 9 -40.055 +14.854 10 -40.029 +21.003 9 -39.761 + 0.408 71 9 -39.169 +53.422 9 -38.963 +26.057 9 -38.529 +11.974 9 -38.367 + 6.899 9 -38.193 + 1.944 9 -38.157 + 2.662 9 -37.803 +23.363 9 -37.738 +16.541 9 -37.028 +21.957 9 -36.890 +16.780 81 10 -36.816 +12.884 9 -36.599 +13.756 9 -36.553 + 3.660 12 -36.344 +35.917 11 -35.020 +24.049 18 -34.951 +16.077 17 -34.742 + 5.912 9 -34.489 +26.742 9 -34.171 +24.022 10 -34.121 +46.034 91 10 -34.066 +28.570 9 -33.630 +42.576 10 -33.516 +33.967 9 -33.328 +37.889 11 -32.972 +31.997 15 -32.800 +51.987 9 -32.634 +39.345 12 -32.315 +21.614 20 -32.011 +29.366 9 -31.820 +19.591 101 9 -31.659 + 8.543 10 -31.410 +26.568 15 -30.852 + 0.404 16 -30.425 +22.686 12 -30.364 +12.736 9 -30.330 +40.236 9 -29.754 +23.198 15 -29.528 +21.004 9 -29.199 +38.240 18 -28.848 +21.164					111, 11 -28.215 +29.100 9 -27.773 +24.131 9 -27.017 +16.345 9 -26.694 +48.328 9 -26.027 +10.163 9 -25.939 +20.590 10 -25.742 + 4.968 14 -25.733 +36.604 9 -24.664 +23.682 9 -24.644 +23.582 121 17 -24.224 +41.016 19 -23.546 +21.114 26 -22.781 +43.212 9 -22.671 +28.172 9 -22.338 +39.039 9 -22.330 +25.516 15 -22.001 + 2.852 10 -21.959 +35.613 15 -21.885 +45.565 9 -21.641 +22.214 131 10 -20.970 +10.468 9 -20.904 +61.680 9 -20.459 +39.327 10 -19.579 +26.810 9 -19.497 +11.457 9 -18.423 +57.356 9 -18.251 + 9.629 9 -18.227 +21.026 9 -17.900 +24.328 15 -17.850 +17.568 141 12 -17.742 +13.219 16 -17.654 +41.966 11 -17.509 +27.414 10 -17.448 + 2.770 9 -16.975 +37.567 11 -16.637 +24.734 9 -16.617 +33.861 9 -16.591 +41.866 9 -16.558 +20.355 10 -16.372 +61.888 151 10 -16.283 + 4.985 9 -16.160 +33.329 15 -16.105 +39.489 9 -16.095 +58.766 19 -16.018 + 7.040 9 -16.000 +15.657 10 -15.754 +29.420 24 -15.687 +50.825 9 -15.615 +55.646 11 -15.358 +42.974 161 9 -15.345 + 2.215 15 -15.236 +24.014 9 -15.125 +17.465 9 -14.946 +37.343 20 -14.453 +30.245 10 -14.330 + 6.740 9 -14.182 +34.809 9 -14.175 +47.943 10 -13.900 +39.803 10 -13.785 +55.917					171, 15 -13.457 +46.378 11 -13.163 +23.064 10 -13.151 +64.043 19 -12.867 +34.183 48 -12.221 + 2.238 9 -12.148 +57.449 16 -12.118 + 4.391 14 -11.888 +61.731 15 -11.732 +12.335 9 -11.699 +38.259 181 10 -11.655 +32.492 14 -11.380 +28.039 15 -11.244 + 7.803 10 -11.242 +31.215 9 -11.203 + 9.294 10 -10.615 +25.152 9 -10.543 +24.608 9 -10.268 +15.816 9 -10.257 + 4.980 10 - 9.967 +64.879 191 28 - 9.849 +41.637 15 - 9.802 +53.654 9 - 9.646 +35.483 17 - 9.211 + 7.884 10 - 9.173 +40.614 9 - 8.924 + 4.959 9 - 8.576 +42.174 10 - 8.506 + 6.647 9 - 8.468 +41.597 9 - 8.226 +13.231 201 9 - 8.164 +15.033 9 - 8.103 +41.806 9 - 7.963 +24.148 15 - 7.476 +63.382 15 - 7.400 + 6.538 9 - 7.216 +16.775 13 - 6.844 +11.340 9 - 6.598 + 7.161 9 - 6.548 +16.326 12 - 6.237 +15.417 211 9 - 5.725 +12.686 9 - 5.509 +43.556 9 - 5.230 +11.473 9 - 5.045 +20.597 18 - 4.866 +47.344 9 - 4.794 +47.332 9 - 4.397 +33.430 9 - 4.288 +23.213 10 - 4.085 + 7.265 16 - 4.050 + 8.243 221 9 - 4.002 +15.594 10 - 3.800 +13.706 9 - 3.328 +34.766 9 - 2.952 +46.484 9 - 2.807 +37.876 9 - 2.620 +46.688 9 - 2.614 + 4.606 9 - 2.608 +55.088 9 - 2.567 +30.815 9 - 2.486 +60.595					65 1939 9.8 65 1940 9.3 65 1941 6.8 65 1942 9.6 64 1977 10.0 65 1943 10.0 65 1945 9.9 65 1944 9.9 65 1946 8.9 64 1978 9.9 65 1947 9.5 65 1948 9.7 65 1949 10.0 65 1950 10.0 65 1951 9.3 65 1952 9.5				
9	-64.596	+16.525	65 1889 9.1 65 1892 9.8 65 1893 10.0 65 1894 9.5 64 1955 9.6 65 1897 9.6 65 1896 9.4 65 1898 9.6 64 1958 9.7 65 1902 9.6 65 1901 9.2 65 1900 9.2 65 1904 9.6 64 1960 9.5 65 1906 9.5 65 1905 8.0	9.1	9.8	9.6	9.4	9.7	9.6	9.2	9.2	9.6	9.5	9.5	9.5	9.3	9.5							
19	-64.176	+ 8.551		9.1	9.8	9.6	9.4	9.7	9.6	9.2	9.2	9.6	9.5	9.5	9.3	9.5								
12	-64.031	+32.082		9.1	9.8	9.6	9.4	9.7	9.6	9.2	9.2	9.6	9.5	9.5	9.3	9.5								
9	-64.013	+ 0.165		9.1	9.8	9.6	9.4	9.7	9.6	9.2	9.2	9.6	9.5	9.5	9.3	9.5								
11	-63.800	+ 0.976																						
9	-63.733	+29.850																						
10	-63.681	+34.638																						
10	-62.317	+12.314	65 1893	10.0																				
9	-61.962	+ 3.882																						
16	-61.940	+ 7.385	65 1894	9.5																				
11	-60.864	+60.028	64 1955	9.6																				
9	-59.554	+ 2.744																						
15	-59.449	+12.038	65 1897	9.6																				
16	-59.403	+ 6.071	65 1896	9.4																				
9	-59.111	+27.782																						
16	-59.106	+ 2.806	65 1898	9.6																				
9	-58.591	+15.668																						
10	-58.481	+63.400	64 1958	9.7																				
10	-58.110	+ 2.312																						
9	-57.485	+23.547																						
11	-56.744	+ 4.435																						
9	-56.717	+15.059																						
9	-56.528	+20.617																						
11	-55.975	+50.499	65 1902	9.6																				
9	-55.832	+41.196																						
9	-55.738	+45.930																						
24	-55.536	+18.855	65 1901	9.2																				
9	-55.326	+ 0.208																						
19	-55.258	+ 9.527	65 1900	9.2																				
9	-55.160	+35.162																						
9	-54.820	+19.747																						
15	-53.658	+18.065	65 1904	9.6																				
9	-53.629	+36.561																						
9	-52.938	+ 2.074																						
9	-52.650	+ 1.419																						
9	-52.648	+ 3.731																						
9	-52.480	+11.571																						
15	-52.411	+53.489	64 1960	9.5																				
9	-52.161	+24.127																						
10	-51.992	+30.561																						
14	-51.987	+50.797	65 1906	9.5																				
36	-51.479	+25.458	65 1905	8.0																				
9	-50.833	+ 3.414																						
11	-50.794	+22.765																						
11	-50.684	+15.869																						
10	-50.602	+41.686																						
9	-50.599	+42.202																						
9	-49.620	+34.251																						
9	-48.938	+ 1.220																						
11	-48.782	+42.734	65 1907	10.0																				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
10	231,				15	291,				16	351,				9	411,			
17	- 2 '366	+23 '749	65 1953	9 '2	9	+ 5 '906	+ 2 '043	65 1967	9 '6	9	+16 '491	+51 '899	65 1983	9 '8	9	+28 '597	+42 '587	65 2001	9 '1
9	- 2 '094	+39 '952			9	+ 5 '993	+31 '454			9	+16 '692	+46 '433			9	+28 '609	+32 '906		
9	- 2 '054	+45 '588			15	+ 6 '028	+42 '141	65 1968	9 '9	10	+16 '713	+ 7 '290	65 1984	9 '3	9	+28 '734	+34 '251		
12	- 1 '959	+12 '264			17	+ 6 '537	+15 '798	65 1969	9 '4	20	+16 '735	+ 7 '666			19	+29 '057	+36 '352		
9	- 1 '814	+32 '347			10	+ 6 '681	+52 '778			10	+17 '378	+18 '338			9	+29 '337	+30 '348		
9	- 1 '673	+64 '366			9	+ 6 '734	+44 '013			9	+17 '394	+21 '883			11	+29 '634	+29 '176		
9	- 1 '552	+11 '003			24	+ 6 '790	+11 '124	65 1970	9 '1	10	+17 '529	+ 5 '392			9	+29 '700	+32 '682		
11	- 1 '316	+39 '748			10	+ 6 '929	+44 '093			9	+17 '893	+ 4 '441	65 1985	9 '3	9	+29 '950	+14 '110		
9	- 1 '084	+29 '871			10	+ 6 '997	+46 '376			19	+18 '208	+26 '474			9	+30 '057	+12 '557		
9	- 0 '930	+51 '177			9	+ 7 '019	+19 '890			11	+18 '666	+21 '655			10	+30 '186	+15 '616		
9	241				17	301				9	361				9	421			
9	- 0 '903	+38 '103			9	+ 7 '142	+11 '061	65 1971	9 '5	9	+18 '863	+32 '284			9	+30 '256	+56 '710		
9	- 0 '803	+27 '933			9	+ 7 '160	+ 1 '372			14	+18 '867	+12 '813			15	+30 '391	+34 '414		
9	- 0 '586	+11 '474			12	+ 7 '232	+56 '349			9	+18 '874	+40 '198			9	+30 '496	+31 '000		
10	- 0 '537	+41 '944			18	+ 7 '408	+53 '078	64 1987	9 '1	12	+19 '133	+41 '239			9	+30 '645	+54 '510		
9	- 0 '205	+28 '694			9	+ 7 '626	+31 '452			9	+19 '267	+25 '307			10	+30 '819	+13 '629		
14	- 0 '088	+22 '663			9	+ 7 '830	+31 '569			10	+19 '363	+31 '487			10	+30 '825	+37 '299	65 2002	10 '0
9	+ 0 '191	+22 '260			9	+ 8 '112	+25 '237			9	+19 '499	+25 '251	65 1988	9 '4	15	+30 '876	+21 '753		
9	+ 0 '332	+ 5 '187			9	+ 8 '217	+26 '769			18	+19 '619	+30 '563			9	+31 '030	+ 3 '134		
9	+ 0 '659	+41 '834			9	+ 8 '401	+15 '336			9	+19 '724	+16 '614			9	+31 '259	+13 '070	65 2003	10 '0
9	+ 0 '770	+30 '423			10	+ 8 '427	+47 '082			9	+20 '190	+24 '837			15	+31 '334	+12 '497		
9	251				9	311				9	371				9	431			
9	+ 0 '800	+34 '835			9	+ 8 '551	+ 4 '018			9	+20 '495	+63 '884			9	+31 '558	+26 '193		
9	+ 0 '986	+28 '737			9	+ 8 '662	+44 '784			11	+20 '633	+34 '340			9	+31 '811	+18 '349		
9	+ 0 '986	+27 '848			9	+ 9 '192	+15 '237			9	+20 '918	+58 '585			10	+31 '889	+14 '200		
9	+ 1 '431	+ 8 '123			11	+ 9 '221	+38 '672			15	+21 '375	+ 8 '635	65 1991	9 '6	19	+32 '178	+45 '145	65 2004	9 '3
10	+ 1 '448	+30 '691			14	+ 9 '326	+ 9 '259	65 1975	10 '0	11	+21 '920	+11 '082			9	+32 '214	+31 '818		
10	+ 1 '764	+ 5 '671			9	+ 9 '493	+44 '322			9	+22 '171	+44 '100			9	+32 '480	+22 '976	64 2006	9 '2
9	+ 1 '881	+38 '029			9	+ 9 '613	+16 '034			11	+22 '305	+17 '820			18	+32 '582	+54 '038		
9	+ 1 '945	+21 '013			9	+ 9 '783	+39 '070			9	+22 '333	+51 '026			9	+32 '741	+62 '173		
9	+ 2 '058	+36 '189			9	+ 9 '895	+39 '464			10	+22 '444	+ 7 '415			18	+32 '816	+28 '105	65 2005	9 '4
10	+ 2 '132	+42 '002			15	+ 9 '923	+22 '911	65 1976	9 '8	15	+22 '706	+ 9 '727	65 1992	9 '9	9	+32 '838	+23 '417		
9	261				11	321				12	381				9	441			
10	+ 2 '133	+11 '977	65 1959	9 '4	10	+10 '054	+33 '368			9	+22 '877	+57 '234			9	+32 '920	+26 '436	65 2006	8 '9
19	+ 2 '159	+38 '882			10	+10 '333	+11 '004			9	+23 '023	+60 '679			20	+32 '940	+18 '407		
9	+ 2 '628	+57 '210			16	+10 '352	+25 '586	65 1977	9 '6	22	+23 '280	+11 '030	65 1993	9 '0	9	+33 '001	+27 '573		
9	+ 2 '659	+13 '556			10	+10 '450	+24 '152			9	+23 '699	+46 '130			22	+33 '102	+63 '995	64 2007	9 '0
10	+ 2 '773	+12 '034			9	+10 '514	+ 6 '765			22	+23 '797	+55 '911	64 1997	8 '9	9	+33 '202	+22 '481		
9	+ 3 '030	+19 '053	65 1960	9 '9	12	+10 '648	+32 '018	65 1978	10 '0	9	+24 '031	+40 '050			9	+33 '214	+ 4 '870	65 2007	10 '0
15	+ 3 '224	+ 1 '552			9	+10 '658	+25 '186			9	+24 '261	+59 '313			11	+33 '236	+17 '353		
15	+ 3 '367	+41 '919			11	+10 '692	+26 '981			9	+24 '586	+41 '508			9	+33 '395	+ 7 '315		
11	+ 3 '624	+27 '597			9	+10 '828	+25 '268			9	+24 '700	+34 '160			9	+33 '446	+ 6 '516		
9	+ 3 '687	+46 '584			15	+10 '840	+35 '553	65 1979	9 '8	14	+24 '903	+16 '664	65 1995	10 '0	15	+33 '591	+45 '148		
9	271				9	331				19	391				9	451			
9	+ 3 '712	+ 7 '207			9	+10 '919	+31 '816			15	+24 '986	+19 '917	65 1994	9 '2	19	+33 '749	+54 '940	64 2009	9 '0
9	+ 3 '886	+28 '741			12	+11 '112	+10 '191			15	+25 '180	+41 '807	65 1996	10 '0	9	+34 '335	+49 '172		
9	+ 3 '953	+37 '206			10	+11 '630	+16 '643			10	+25 '334	+ 2 '784	65 1997	10 '0	9	+34 '336	+ 6 '575		
10	+ 3 '963	+55 '533			9	+11 '742	+ 5 '517			9	+25 '585	+40 '158			14	+34 '418	+31 '793		
9	+ 3 '964	+14 '806			16	+12 '221	+41 '028	65 1980	9 '5	12	+25 '600	+63 '795			9	+34 '599	+22 '688		
9	+ 4 '016	+48 '325			9	+12 '247	+11 '147			9	+25 '956	+57 '584			12	+34 '891	+29 '180		
9	+ 4 '126	+15 '803			10	+12 '381	+16 '830			9	+26 '128	+35 '548			10	+34 '895	+16 '172		
15	+ 4 '146	+35 '403	65 1962	10 '0	10	+12 '493	+20 '343			9	+26 '253	+19 '751			10	+35 '160	+ 4 '711		
9	+ 4 '356	+ 0 '299			9	+12 '508	+55 '088			9	+26 '687	+14 '854			10	+35 '530	+15 '631		
17	+ 4 '448	+ 7 '053	65 1963	9 '5	10	+12 '600	+ 3 '964			18	+26 '770	+ 9 '517	65 1998	9 '6	9	+35 '965	+20 '402		
11	281				9	341				18	401				10	461			
9	+ 4 '741	+12 '974	65 1964	10 '0	9	+12 '915	+ 7 '893			18	+27 '089	+64 '979	64 1999	9 '2	10	+36 '042	+17 '033		
9	+ 4 '965	+14 '302	65 1965	10 '0	9	+12 '964	+34 '073			9	+27 '173	+64 '039			9	+36 '260	+ 4 '396		
12	+ 5 '132	+14 '259			9	+13 '248	+15 '534			15	+27 '470	+62 '429	64 2000	9 '9	10	+36 '614	+ 5 '625		
42	+ 5 '260	+ 5 '479	65 1966	7 '6	9	+13 '790	+ 7 '517			9	+27 '606	+13 '964			20	+36 '663	+54 '950	64 2010	9 '1
9	+ 5 '341	+56 '159			9	+14 '007	+ 9 '076			9	+27 '642	+56 '665			9	+36 '804	+ 4 '240		
10	+ 5 '343	+12 '529			9	+14 '644	+26 '286			10	+27 '821	+ 8 '073			10	+36 '816	+60 '309	64 2011	9 '9
9	+ 5 '415	+21 '168			20	+15 '163	+28 '841	65 1981	9 '2	11	+27 '852	+38 '352			15	+36 '827	+ 9 '132	65 2009	10 '0
9	+ 5 '415	+20 '486			15	+15 '831	+12 '757	65 1982	9 '8	9	+28 '027	+20 '133			9	+36 '865	+38 '276		
9	+ 5 '431	+18 '820			11	+16 '045	+27 '743			9	+28 '078	+11 '656			9	+37 '267	+10 '714		
10	+ 5 '608	+13 '203			9	+16 '053	+28 '816			10	+28 '311	+57 '592			9	+37 '477	+11 '398		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471					531					591					651			
9	+37 '545	+11 '411			9	+46 '156	+16 '788			9	+55 '811	+18 '186			10	-61 '542	-41 '090	66 1797	10 '0
15	+37 '684	+24 '211			16	+46 '365	+40 '166	65 2024	9 '4	9	+55 '868	+25 '775			9	-61 '158	-43 '589		
10	+37 '851	+31 '596			9	+46 '616	+62 '544			9	+56 '426	+18 '000			16	-61 '072	-4 '009	65 1895	9 '7
9	+37 '877	+20 '847			11	+47 '144	+34 '897			10	+56 '489	+40 '585			10	-60 '911	-45 '230	66 1798	10 '0
14	+38 '014	+54 '296	64 2015	9 '8	10	+47 '161	+1 '297			9	+56 '538	+4 '188			11	-60 '890	-40 '124	66 1800	9 '7
9	+38 '070	+55 '571			9	+47 '186	+34 '656			9	+56 '563	+25 '414			9	-60 '204	-6 '981		
13	+38 '127	+29 '029	65 2011	10 '0	9	+47 '200	+10 '042			10	+56 '582	+8 '336			9	-60 '170	-50 '387		
20	+38 '272	+28 '710	65 2012	9 '1	9	+47 '201	+38 '172			10	+56 '644	+52 '593	64 2035	10 '0	11	-59 '357	-42 '203	66 1801	9 '7
14	+38 '282	+47 '864	65 2010	10 '0	10	+47 '202	+1 '684			10	+56 '809	+14 '283			10	-59 '055	-31 '523		
12	+38 '389	+30 '819			10	+47 '248	+4 '170			15	+57 '134	+53 '033	64 2036	9 '2	9	-58 '668	-30 '199		
	481					541					601					661			
19	+38 '417	+29 '525	65 2013	9 '2	9	+47 '500	+32 '203			15	+57 '135	+18 '870	65 2038	9 '8	18	-58 '501	-13 '742	66 1802	9 '4
16	+38 '485	+12 '238	65 2014	9 '6	9	+47 '542	+33 '236			9	+57 '608	+51 '056			9	-58 '464	-32 '176		
9	+38 '899	+14 '450			15	+47 '742	+9 '749			9	+57 '629	+52 '142			9	-58 '339	-55 '139		
9	+39 '095	+37 '586			9	+47 '823	+35 '134			15	+57 '854	+3 '090	65 2039	9 '9	10	-58 '056	-31 '663		
9	+39 '574	+50 '168			9	+47 '929	+10 '214			9	+57 '911	+5 '697			9	-57 '721	-42 '688		
11	+39 '782	+12 '422			9	+47 '989	+38 '279			10	+58 '203	+17 '744			11	-57 '657	-26 '308	66 1803	10 '0
9	+40 '089	+28 '135			16	+48 '068	+62 '831	64 2023	9 '2	10	+58 '294	+6 '664			9	-57 '528	-2 '970		
10	+40 '353	+20 '203	65 2015	10 '0	9	+48 '075	+10 '842			9	+58 '381	+49 '109			11	-57 '072	-38 '501	66 1804	10 '0
9	+40 '396	+19 '227			9	+48 '078	+59 '456			9	+58 '702	+62 '952			9	-56 '887	-26 '034		
9	+40 '441	+22 '801			22	+48 '086	+0 '393	65 2027	8 '5	18	+58 '885	+14 '539	65 2043	9 '2	14	-56 '846	-5 '307		
	491					551					611					671			
10	+40 '443	+20 '165			9	+48 '362	+25 '077			10	+58 '908	+42 '327			9	-56 '682	-23 '627		
9	+40 '467	+33 '137			9	+48 '840	+44 '250			11	+58 '933	+10 '085			9	-56 '672	-33 '327		
19	+40 '470	+19 '703	65 2016	9 '6	9	+48 '845	+0 '492			15	+59 '032	+31 '875	65 2040	9 '4	9	-56 '571	-46 '052		
9	+40 '585	+60 '068			9	+48 '970	+21 '625			24	+59 '241	+33 '692	65 2041	8 '5	11	-56 '026	-8 '044		
9	+40 '690	+46 '306			11	+49 '060	+26 '252			12	+59 '382	+0 '235			16	-55 '346	-3 '976	65 1899	10 '0
9	+40 '870	+20 '665			10	+49 '408	+27 '908			9	+59 '725	+27 '477			10	-54 '820	-45 '958		
12	+41 '041	+31 '895	65 2017	10 '0	15	+49 '423	+39 '690	65 2028	9 '9	10	+59 '827	+35 '996			11	-54 '064	-49 '384	66 1805	10 '0
10	+41 '065	+21 '477			9	+49 '600	+60 '863			18	+60 '009	+49 '281	65 2042	9 '2	9	-53 '882	-9 '848		
15	+41 '227	+33 '133	65 2018	9 '7	9	+49 '681	+21 '882			16	+60 '032	+19 '028	65 2044	9 '4	21	-53 '577	-9 '373	65 1903	9 '2
11	+41 '253	+38 '469			9	+49 '711	+19 '587			12	+60 '424	+60 '430	64 2039	9 '5	9	-53 '222	-8 '569		
	501					561					621					681			
9	+41 '386	+56 '468			9	+49 '810	+26 '313			9	+60 '427	+14 '251			9	-52 '379	-20 '404		
11	+41 '493	+63 '655	64 2017	9 '8	13	+49 '983	+50 '992	65 2029	9 '5	24	+60 '771	+41 '181	65 2045	9 '0	9	-51 '783	-36 '714		
9	+41 '757	+2 '089			10	+50 '340	+20 '813			9	+61 '382	+0 '408			9	-51 '390	-33 '303		
15	+42 '010	+7 '936	65 2020	10 '0	11	+50 '410	+17 '281			19	+61 '763	+29 '655	65 2047	9 '2	11	-51 '271	-41 '749	66 1806	9 '9
9	+42 '085	+6 '243			9	+50 '473	+20 '585			9	+62 '213	+1 '449			11	-51 '085	-37 '412		
9	+42 '291	+13 '045			9	+50 '509	+59 '004			10	+62 '291	+27 '887			12	-50 '314	-4 '191		
9	+42 '379	+25 '528			9	+50 '582	+22 '145			9	+63 '536	+19 '315			10	-50 '307	-21 '611		
14	+42 '794	+41 '657			24	+50 '783	+26 '305	65 2030	8 '8	9	+63 '851	+34 '240			10	-50 '079	-14 '128		
15	+42 '996	+49 '042	65 2019	10 '0	10	+51 '061	+35 '762			10	+63 '868	+35 '783			9	-50 '060	-61 '139	66 1807	10 '0
21	+43 '195	+7 '155	65 2021	9 '2	14	+51 '566	+51 '796	64 2029	9 '8	16	+63 '932	+19 '856	65 2048	9 '5	9	-49 '840	-56 '923		
	511					571					631					691			
11	+43 '395	+21 '763			16	+51 '661	+6 '236	65 2032	9 '8	20	+64 '010	+10 '523	65 2049	9 '0	10	-49 '692	-20 '139		
15	+43 '465	+55 '782	64 2019	9 '6	9	+51 '782	+48 '891			9	+64 '137	+43 '259			10	-49 '488	-9 '199		
10	+43 '991	+9 '069			11	+51 '804	+15 '972			10	+64 '681	+38 '612			10	-49 '348	-39 '661		
9	+44 '186	+15 '796			15	+52 '090	+51 '669	64 2030	9 '4	18	-64 '746	-14 '002	66 1795	9 '6	9	-49 '140	-22 '102		
9	+44 '253	+0 '309			9	+52 '141	+26 '135			11	-64 '423	-38 '596	66 1793	10 '0	10	-49 '109	-49 '025	66 1808	10 '0
9	+44 '452	+18 '095			16	+52 '230	+42 '743	65 2031	9 '5	10	-64 '161	-46 '473	66 1792	10 '0	10	-49 '049	-34 '060		
40	+44 '573	+57 '212	64 2020	7 '4	9	+52 '482	+19 '144			9	-64 '127	-9 '415			11	-48 '275	-17 '423		
16	+44 '608	+57 '388			15	+52 '545	+13 '434	65 2034	9 '9	18	-63 '671	-1 '570	65 1890	9 '2	9	-48 '146	-20 '727		
10	+44 '946	+33 '047			20	+52 '733	+21 '328	65 2033	9 '2	12	-63 '641	-4 '627	65 1888	9 '7	9	-47 '735	-17 '320		
9	+45 '093	+23 '053			9	+52 '944	+16 '050			11	-63 '460	-2 '908	65 1891	10 '0	16	-47 '622	-18 '491	66 1810	10 '0
	521					581					641					701			
9	+45 '098	+63 '813			9	+53 '503	+64 '338			9	-63 '167	-29 '725			12	-47 '401	-41 '987	66 1809	9 '6
10	+45 '203	+40 '320			10	+53 '540	+50 '416			10	-63 '091	-3 '428			9	-47 '000	-29 '165		
9	+45 '456	+26 '835			24	+53 '641	+6 '126	65 2035	8 '6	9	-62 '938	-4 '294			9	-46 '870	-13 '236		
15	+45 '626	+23 '537			9	+54 '003	+31 '562			9	-62 '914	-17 '162			9	-46 '794	-15 '447		
10	+45 '665	+50 '042	65 2022	10 '0	9	+54 '040	+51 '808			10	-62 '854	-28 '179			9	-46 '777	-62 '009		
15	+45 '700	+23 '595	65 2023	9 '5	9	+54 '118	+4 '648			10	-62 '333	-52 '839	66 1796	10 '0	9	-46 '324	-28 '850		
9	+45 '790	+64 '443			10	+54 '737	+8 '800			9	-61 '981	-51 '638			17	-45 '639	-59 '562	66 1811	9 '2
9	+45 '809	+37 '167			22	+54 '948	+45 '275	65 2036	9 '0	17	-61 '969	-21 '116	66 1799	9 '5	10	-45 '610	-20 '035		
18	+45 '834	+63 '556	64 2021	9 '1	9	+55 '131	+35 '298			9	-61 '967	-17 '960			9	-44 '845	-18 '778		
9	+46 '132	+53 '261			9	+55 '604	+1 '717	65 2037	10 '0	9	-61 '902	-42 '828			16	-44 '250	-30 '874	66 1813	9 '8

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	711					771					831					891			
9	-44°013	-35°828			28	-82°896	-46°069	66 1833	8'7	9	-23°442	-29°252			9	-11°949	-63°624		
9	-43°390	-29°111			11	-32°326	-24°960	66 1835	10'0	9	-23°296	-36°165			11	-11°521	-0°184		
9	-43°164	-14°717			9	-32°254	-37°161			16	-23°090	-30°145	66 1855	9'5	9	-11°447	-57°238		
9	-42°665	-38°462			9	-32°134	-24°806			10	-22°886	-33°367			17	-11°377	-38°841	66 1868	9'6
9	-42°516	-16°358			10	-32°086	-20°767			10	-22°740	-43°811			9	-11°369	-36°097		
13	-42°393	-53°265	66 1814	9'8	9	-31°881	-40°425			10	-21°524	-13°250			12	-11°318	-49°834	66 1867	10'0
9	-42°169	-51°176			10	-31°818	-41°916			11	-21°377	-57°867			9	-11°143	-52°900		
9	-41°915	-1°059			15	-31°640	-22°862			9	-21°284	-15°439			9	-10°954	-11°103		
17	-41°831	-54°255	66 1815	9'2	11	-31°430	-31°407			9	-21°236	-63°326			16	-10°835	-39°471	66 1869	9'9
12	-41°416	-12°588			17	-31°196	-31°153	66 1836	9'5	9	-21°222	-42°890			16	-10°700	-45°730	66 1870	9'6
	721					781					841					901			
10	-41°360	-63°852	66 1816	10'0	9	-31°161	-30°048			16	-21°159	-2°942			10	-10°589	-1°489		
10	-41°017	-39°740			10	-31°014	-11°512			9	-21°154	-17°235			9	-10°351	-57°812		
9	-40°980	-59°807			28	-30°981	-40°671	66 1837	8'4	9	-20°782	-25°884			11	-10°285	-30°357		
9	-40°823	-15°882			10	-30°429	-12°910			9	-20°432	-11°934			9	-10°250	-46°370		
17	-40°735	-17°490	66 1817	9'6	9	-30°253	-53°297			10	-20°254	-40°902			12	-9°954	-9°754	66 1871	10'0
9	-40°616	-19°294			12	-30°222	-59°753	66 1838	10'0	9	-20°072	-22°894			9	-9°793	-20°809		
18	-40°342	-27°301	66 1818	9'6	14	-30°222	-35°614	66 1840	9'9	9	-19°880	-3°411			9	-9°356	-55°728		
19	-39°844	-15°230	66 1821	9'2	20	-30°032	-34°867	66 1841	9'1	17	-19°650	-35°620	66 1857	9'5	11	-9°283	-47°425		
16	-39°798	-10°435	66 1822	10'0	10	-29°927	-38°461			16	-19°451	-42°282	66 1858	9'8	12	-9°051	-4°627		
11	-39°591	-11°332			13	-29°492	-16°842	66 1843	10'0	16	-19°305	-61°725	66 1856	9'6	9	-8°517	-32°637		
	731					791					851					911			
12	-39°066	-47°371	66 1820	9'9	11	-29°355	-35°918	66 1842	10'0	10	-19°063	-63°204			10	-8°514	-51°231		
9	-39°060	-13°337			9	-29°217	-39°567			10	-19°039	-21°828			12	-8°153	-44°098		
11	-38°618	-23°845			9	-29°169	-8°465			9	-18°932	-39°345			18	-8°061	-56°620	66 1872	9'2
9	-38°556	-30°119			15	-28°912	-14°356	66 1846	10'0	24	-18°914	-9°079	66 1859	8'9	11	-7°824	-14°062		
10	-38°375	-37°679			9	-28°820	-17°647			9	-18°875	-42°623			10	-7°715	-27°696		
9	-38°159	-29°128			16	-28°557	-38°429	66 1845	10'0	10	-18°847	-34°774			10	-7°327	-38°451		
9	-38°123	-44°455			16	-28°513	-20°566	66 1847	10'0	18	-18°750	-19°599	66 1860	9'2	10	-7°157	-40°314	66 1873	9'8
19	-38°013	-23°647	66 1824	9'2	15	-28°470	-13°590	66 1849	10'0	10	-18°727	-14°525			10	-7°135	-10°366		
9	-37°436	-47°227			12	-28°403	-17°153			9	-18°672	-35°417			14	-7°105	-40°851	66 1874	10'0
18	-37°372	-8°710	65 1913	9'4	9	-28°436	-3°760			17	-18°552	-0°261	65 1929	10'0	11	-7°014	-42°866		
	741					801					861					921			
10	-37°155	-26°725			9	-27°968	-24°858			15	-18°394	-38°923			12	-6°895	-44°071	66 1875	10'0
9	-37°024	-22°723			11	-27°618	-61°474	66 1848	9'9	48	-18°270	-39°195	66 1861	6'7	10	-6°604	-11°108		
12	-36°917	-11°612			9	-27°610	-37°781			9	-18°212	-46°378			9	-6°501	-16°460		
9	-36°601	-40°735			9	-27°499	-46°482			10	-18°168	-2°390			9	-6°145	-42°127		
16	-36°466	-18°767	66 1825	9'0	11	-27°078	-48°287			9	-17°984	-39°795			15	-6°127	-62°878	66 1876	9'7
10	-36°318	-39°187			11	-26°968	-42°699			9	-17°969	-50°528			9	-6°115	-42°914		
16	-36°254	-28°089	66 1827	9'9	20	-26°718	-17°791	66 1850	9'4	16	-17°572	-3°767	65 1931	9'9	9	-6°075	-41°484		
10	-36°119	-29°946			11	-26°630	-16°867			9	-16°885	-32°148			9	-6°057	-35°201		
10	-35°822	-16°120			11	-26°625	-59°247			9	-16°773	-37°171			11	-5°992	-8°195		
9	-35°701	-35°876			9	-26°513	-0°398			10	-16°423	-20°222			10	-5°988	-41°514		
	751					811					871					931			
12	-35°667	-44°908	66 1829	10'0	9	-26°298	-50°332			12	-16°417	-41°316			9	-5°880	-25°166		
9	-35°626	-62°531			11	-26°239	-39°020			10	-16°196	-22°016			16	-5°541	-35°345	66 1877	9'9
9	-35°490	-3°620			13	-25°997	-27°269			11	-15°869	-31°186			14	-5°483	-16°924	66 1878	10'0
10	-35°474	-39°900			10	-25°857	-0°761			9	-15°723	-34°608			18	-5°007	-16°468	66 1879	9'2
18	-35°274	-60°405	66 1828	9'2	9	-25°837	-50°310			9	-15°405	-53°590			9	-4°774	-39°564		
10	-35°189	-28°635			9	-25°692	-32°939			17	-14°806	-13°863	66 1862	9'5	9	-4°077	-31°373		
11	-34°908	-31°841	66 1830	10'0	10	-25°514	-62°508			10	-14°637	-6°703			9	-4°056	-53°191		
12	-34°883	-44°167			11	-25°370	-45°935			16	-14°332	-26°480	66 1863	9'7	9	-4°024	-18°104		
10	-34°862	-31°080			17	-25°358	-43°709	66 1851	9'5	11	-14°037	-43°877			9	-3°999	-18°797		
9	-33°968	-29°512			11	-25°334	-26°893			9	-13°935	-61°744			9	-3°682	-40°739		
	761					821					881					941			
9	-33°808	-39°493			11	-25°319	-6°993			10	-13°929	-18°032			9	-3°663	-16°899		
9	-33°777	-57°253			11	-25°226	-29°236			9	-13°580	-56°489			11	-3°660	-23°992		
11	-33°658	-58°943	66 1831	10'0	9	-25°133	-22°669			9	-13°258	-14°956			10	-3°177	-40°816		
10	-33°308	-45°093			9	-24°698	-47°712			10	-13°096	-48°496			13	-2°620	-2°310		
15	-33°248	-42°714	66 1832	10'0	18	-24°632	-31°895	66 1852	9'3	15	-12°872	-10°206	66 1865	10'0	17	-2°433	-11°048	66 1880	9'5
10	-33°160	-30°315			16	-24°394	-0°917	65 1923	10'0	9	-12°820	-44°829			26	-2°412	-25°601	66 1881	8'8
10	-32°875	-55°678			19	-23°917	-22°300	66 1853	9'3	13	-12°737	-46°347	66 1864	10'0	9	-1°809	-16°983		
10	-32°611	-22°069			11	-23°762	-43°030			10	-12°724	-35°073			17	-1°560	-13°960	66 1883	9'6
11	-32°594	-24°507			9	-23°719	-24°008			26	-12°559	-29°911	66 1866	8'6	17	-1°552	-7°223	65 1954	9'7
36	-32°563	-38°077	66 1834	7'8	21	-23°648	-28°961	66 1854	9'1	11	-12°005	-35°223			18	-1°488	-42°324	66 1882	9'4

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	951					1011					1071					1131			
9	- 1' 433	- 2' 836			9	+ 7' 863	- 8' 062			11	+ 17' 680	- 31' 999			10	+ 28' 083	- 16' 477		
9	- 1' 412	- 14' 015			9	+ 7' 902	- 13' 678			10	+ 17' 928	- 43' 107			16	+ 28' 179	- 38' 967	66 1928	9' 6
19	- 1' 221	- 13' 676	66 1884	9' 4	9	+ 8' 237	- 54' 661			11	+ 18' 095	- 25' 128			10	+ 28' 204	- 11' 434		
10	- 1' 092	- 43' 060			9	+ 8' 355	- 28' 238			19	+ 18' 380	- 5' 022	65 1986	9' 4	18	+ 28' 520	- 30' 026	66 1929	9' 1
16	- 0' 826	- 55' 516	66 1885	9' 8	25	+ 8' 357	- 8' 528	66 1898	9' 0	9	+ 18' 588	- 1' 551			16	+ 28' 671	- 39' 629	66 1930	9' 6
9	- 0' 438	- 63' 219			10	+ 8' 528	- 56' 491			9	+ 18' 668	- 6' 223			15	+ 28' 975	- 2' 522		
9	- 0' 356	- 7' 864			9	+ 8' 601	- 45' 523			9	+ 18' 773	- 20' 305			9	+ 29' 013	- 15' 100		
9	- 0' 258	- 39' 069			24	+ 8' 924	- 4' 538	65 1973	8' 9	13	+ 18' 861	- 22' 274	66 1910	10' 0	9	+ 29' 523	- 39' 590		
12	- 0' 072	- 4' 362	65 1955	9' 8	9	+ 8' 977	- 28' 314			19	+ 18' 973	- 16' 237	66 1911	9' 2	11	+ 29' 596	- 13' 476		
10	+ 0' 121	- 6' 227			11	+ 9' 091	- 6' 594			12	+ 19' 009	- 57' 616	66 1913	9' 9	10	+ 29' 618	- 8' 625		
	961					1021					1081					1141			
17	+ 0' 399	- 57' 052	66 1886	9' 4	11	+ 9' 112	- 4' 065	65 1974	10' 0	15	+ 19' 188	- 16' 936	66 1912	9' 9	16	+ 29' 882	- 47' 213	66 1931	9' 8
9	+ 0' 473	- 61' 375			16	+ 9' 176	- 21' 438	66 1899	9' 8	17	+ 19' 195	- 7' 293	65 1987	9' 8	14	+ 30' 056	- 57' 834	66 1933	9' 6
9	+ 0' 726	- 49' 132			9	+ 9' 387	- 25' 370			9	+ 19' 312	- 60' 420			10	+ 30' 085	- 0' 684		
9	+ 0' 782	- 47' 201			9	+ 9' 418	- 33' 849			16	+ 19' 440	- 8' 107	65 1989	10' 0	9	+ 30' 268	- 37' 087		
9	+ 0' 876	- 32' 881			11	+ 9' 483	- 7' 920			22	+ 19' 887	- 6' 139	65 1990	9' 0	11	+ 30' 355	- 25' 190		
9	+ 1' 071	- 55' 265			10	+ 9' 658	- 39' 833			11	+ 20' 637	- 37' 619			10	+ 30' 399	- 0' 412		
16	+ 1' 175	- 1' 356	65 1956	9' 8	14	+ 9' 925	- 13' 246	66 1900	10' 0	17	+ 20' 661	- 44' 378	66 1915	9' 6	9	+ 30' 435	- 25' 379		
9	+ 1' 234	- 30' 503			9	+ 10' 282	- 8' 841			25	+ 20' 801	- 64' 691	66 1916	8' 5	9	+ 30' 443	- 0' 147		
18	+ 1' 451	- 5' 181	65 1957	9' 8	9	+ 10' 290	- 8' 475			9	+ 20' 938	- 5' 959			16	+ 30' 495	- 26' 178	66 1932	9' 7
9	+ 1' 708	- 12' 444			9	+ 10' 524	- 54' 621			10	+ 21' 276	- 36' 863			13	+ 30' 570	- 0' 547		
	971					1031					1091					1151			
12	+ 1' 711	- 10' 690	66 1887	10' 0	10	+ 10' 762	- 35' 506			11	+ 21' 277	- 13' 034			15	+ 31' 175	- 50' 577	66 1934	10' 0
9	+ 1' 938	- 58' 213			26	+ 10' 849	- 62' 747	66 1901	8' 8	16	+ 21' 358	- 19' 404	66 1917	9' 8	9	+ 31' 327	- 49' 731		
9	+ 2' 019	- 27' 407			10	+ 11' 023	- 35' 432			10	+ 21' 480	- 58' 060			9	+ 31' 653	- 26' 418		
10	+ 2' 127	- 60' 630			15	+ 11' 052	- 37' 843			9	+ 21' 484	- 52' 399			9	+ 31' 871	- 38' 586		
9	+ 2' 127	- 43' 940			14	+ 11' 092	- 46' 251			10	+ 21' 557	- 54' 407			10	+ 32' 231	- 19' 526		
16	+ 2' 155	- 7' 913	65 1958	9' 9	9	+ 11' 178	- 17' 318			17	+ 21' 671	- 40' 898	66 1918	9' 6	15	+ 32' 356	- 39' 645	66 1935	9' 9
11	+ 2' 276	- 34' 614			12	+ 11' 377	- 61' 607	66 1902	9' 4	13	+ 21' 848	- 18' 795			9	+ 32' 503	- 12' 804		
9	+ 2' 306	- 16' 042			11	+ 11' 401	- 61' 469			18	+ 22' 319	- 44' 480	66 1920	9' 2	11	+ 32' 627	- 51' 651		
18	+ 2' 520	- 50' 695	66 1889	9' 2	11	+ 11' 577	- 44' 384			10	+ 22' 728	- 46' 237			16	+ 32' 879	- 25' 670	66 1938	10' 0
9	+ 2' 639	- 29' 736			9	+ 11' 630	- 15' 038			11	+ 22' 806	- 25' 428			17	+ 32' 909	- 14' 383	66 1936	9' 6
	981					1041					1101					1161			
13	+ 2' 808	- 59' 762	66 1890	9' 8	9	+ 11' 700	- 48' 489			9	+ 22' 865	- 13' 519			16	+ 33' 010	- 19' 782	66 1937	9' 6
11	+ 2' 933	- 15' 471			15	+ 11' 732	- 46' 924	66 1903	10' 0	14	+ 22' 922	- 46' 527	66 1921	10' 0	10	+ 33' 077	- 8' 221		
9	+ 3' 006	- 25' 277			9	+ 11' 807	- 51' 426			9	+ 22' 942	- 8' 159			12	+ 33' 481	- 27' 992		
11	+ 3' 050	- 0' 833			9	+ 12' 085	- 21' 391			9	+ 23' 171	- 0' 499			15	+ 33' 787	- 7' 845	65 2008	10' 0
11	+ 3' 831	- 53' 867			16	+ 12' 128	- 39' 557	66 1904	9' 8	9	+ 23' 284	- 12' 650			9	+ 34' 075	- 33' 759		
11	+ 3' 881	- 24' 520			11	+ 12' 434	- 14' 862	66 1905	10' 0	9	+ 23' 373	- 42' 884			12	+ 34' 155	- 61' 256	66 1940	10' 0
9	+ 4' 044	- 39' 237			14	+ 12' 560	- 35' 879			16	+ 23' 406	- 0' 976			15	+ 35' 495	- 52' 265	66 1941	10' 0
15	+ 4' 144	- 33' 367	66 1891	10' 0	9	+ 12' 983	- 5' 290			16	+ 23' 416	- 64' 633	66 1924	9' 4	9	+ 35' 895	- 19' 794		
9	+ 4' 484	- 10' 411			17	+ 12' 988	- 33' 596	66 1906	9' 6	18	+ 23' 549	- 38' 281	66 1923	9' 3	11	+ 35' 976	- 39' 847		
17	+ 4' 561	- 40' 850	66 1892	9' 4	9	+ 13' 036	- 31' 751			9	+ 23' 577	- 5' 501			16	+ 36' 101	- 31' 440	66 1942	10' 0
	991					1051					1111					1171			
11	+ 4' 662	- 1' 738			12	+ 13' 242	- 6' 799			17	+ 23' 657	- 22' 271	66 1922	9' 0	9	+ 36' 451	- 49' 540		
12	+ 4' 724	- 30' 983			9	+ 13' 812	- 25' 947			9	+ 23' 728	- 46' 467			9	+ 36' 599	- 57' 704		
9	+ 5' 178	- 38' 989			11	+ 13' 824	- 18' 972			13	+ 23' 740	- 56' 281	66 1925	9' 9	15	+ 36' 633	- 58' 525	66 1943	9' 6
16	+ 5' 417	- 34' 965	66 1893	10' 0	9	+ 13' 834	- 7' 737			9	+ 24' 312	- 16' 354			9	+ 37' 143	- 33' 912		
9	+ 5' 521	- 26' 838			11	+ 14' 000	- 21' 331			9	+ 24' 800	- 45' 196			30	+ 37' 216	- 35' 936	66 1944	8' 1
16	+ 5' 528	- 13' 284	66 1894	9' 6	9	+ 14' 065	- 46' 947			9	+ 24' 904	- 23' 974			15	+ 37' 314	- 19' 271		
9	+ 5' 794	- 11' 234			9	+ 14' 085	- 7' 780			11	+ 25' 371	- 60' 848	66 1926	9' 8	11	+ 37' 358	- 8' 885		
9	+ 5' 958	- 11' 405			10	+ 14' 091	- 23' 981			11	+ 25' 420	- 19' 512			24	+ 37' 444	- 35' 973		
9	+ 6' 102	- 27' 313			9	+ 14' 354	- 50' 745			10	+ 25' 599	- 54' 692			11	+ 37' 498	- 9' 628		
9	+ 6' 141	- 43' 442			14	+ 15' 003	- 10' 370	66 1907	10' 0	9	+ 26' 150	- 4' 413			9	+ 37' 510	- 23' 631		
	1001					1061					1121					1181			
9	+ 6' 311	- 7' 009			9	+ 15' 091	- 16' 850			13	+ 26' 170	- 32' 031			11	+ 37' 578	- 7' 719		
10	+ 6' 415	- 26' 734			17	+ 15' 207	- 46' 475	66 1908	9' 6	9	+ 26' 285	- 6' 009			9	+ 37' 647	- 14' 772		
9	+ 6' 890	- 6' 709			10	+ 15' 355	- 57' 679			11	+ 26' 393	- 44' 149			16	+ 37' 892	- 3' 617		
11	+ 6' 957	- 28' 042			10	+ 15' 411	- 39' 870			18	+ 26' 813	- 6' 656	65 1999	9' 4	20	+ 37' 989	- 41' 410	66 1946	9' 7
16	+ 7' 210	- 37' 909	66 1895	10' 0	9	+ 16' 222	- 1' 061			11	+ 26' 927	- 34' 491			28	+ 38' 014	- 49' 700	66 1947	8' 2
17	+ 7' 278	- 5' 567	65 1972	9' 8	16	+ 16' 231	- 37' 974	66 1909	10' 0	21	+ 26' 960	- 16' 651	66 1927	8' 8	20	+ 38' 391	- 13' 770	66 1945	9' 1
17	+ 7' 322	- 50' 971	66 1896	9' 2	9	+ 16' 757	- 14' 922			10	+ 27' 215	- 6' 519			10	+ 38' 558	- 40' 762	66 1949	9' 9
16	+ 7' 584	- 11' 309	66 1897	9' 6	10	+ 16' 912	- 24' 777			9	+ 27' 311	- 50' 985			16	+ 38' 856	- 20' 467	66 1948	9' 6
9	+ 7' 658	- 59' 473			11	+ 17' 491	- 14' 934			16	+ 27' 685	- 2' 690	65 2000	10' 0	9	+ 39' 042	- 21' 127		
9	+ 7' 700	- 18' 036			10	+ 17' 504	- 23' 589			9	+ 27' 816	- 18' 227			9	+ 39' 245	- 13' 500		

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Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
21	-33° 870	+43° 102	65 2069	9° 0	10	+1° 017	+58° 627	64 2106	10° 0	13	+31° 719	+61° 397	64 2146	9° 2	26	-63° 150	-0° 101	65 2027	8° 5
11	-33° 361	+5° 605	65 2067	9° 3	10	+2° 386	+52° 231			9	+31° 785	+18° 371			9	-63° 029	-61° 824	66 1953	10° 0
15	-32° 921	+31° 151	65 2071	9° 0	9	+2° 656	+3° 732	65 2109	10° 0	11	+32° 992	+19° 039	65 2144	9° 6	9	-63° 056	-9° 604	66 1954	10° 0
9	-32° 663	+46° 940			16	+3° 192	+3° 577	65 2110	8° 8	15	+33° 145	+10° 995	65 2146	9° 1	9	-62° 284	-12° 332	66 1955	10° 0
10	-32° 230	+35° 605	65 2074	10° 0	22	+3° 854	+41° 917	65 2111	8° 8	11	+33° 580	+49° 042	65 2145	9° 6	9	-61° 653	-13° 067	66 1956	10° 0
12	-31° 782	+10° 027	65 2073	9° 2	12	+4° 165	+53° 494	64 2109	9° 8	9	+33° 758	+63° 492			9	-60° 020	-33° 501	66 1957	9° 9
10	-31° 287	+46° 716			9	+4° 858	+61° 556			11	+34° 544	+27° 051	65 2148	9° 9	9	-58° 233	-42° 152	66 1958	10° 0
10	-31° 122	+59° 084	64 2071	9° 9	9	+4° 940	+49° 285	65 2112	10° 0	10	+34° 570	+61° 805	64 2149	10° 0	9	-56° 913	-24° 487	65 1961	10° 0
9	-30° 677	+40° 877			10	+5° 596	+38° 810	65 2113	10° 0	22	+36° 026	+55° 570	64 2151	8° 6	9	-56° 775	-18° 039	66 1962	10° 0
9	-30° 385	+9° 507			9	+6° 983	+23° 187	65 2114	10° 0	9	+36° 321	+50° 378			9	-56° 753	59° 107	66 1959	10° 0
	61					121					181					241			
10	-30° 087	+53° 916	64 2073	10° 0	9	+7° 655	+44° 804	65 2115	10° 0	11	+37° 544	+12° 214	65 2149	9° 4	9	-56° 299	-6° 051		
9	-29° 283	+49° 761			12	+7° 872	+55° 265	64 2113	9° 5	13	+38° 306	+62° 342	64 2154	9° 2	15	-56° 132	-51° 227	66 1960	9° 9
9	-28° 550	+50° 568			11	+10° 049	+40° 537	65 2116	9° 4	10	+38° 806	+30° 954			9	-54° 778	-13° 304		
10	-28° 353	+9° 846	65 2075	10° 0	9	+10° 559	+50° 250			11	+38° 905	+4° 426	65 2150	9° 6	10	-53° 737	-25° 973	66 1964	9° 6
9	-28° 282	+10° 764	65 2076	10° 0	18	+10° 914	+24° 328	65 2117	8° 8	11	+39° 101	+58° 616	64 2157	9° 3	18	-53° 615	-19° 686	66 1965	8° 9
9	-28° 225	+32° 933			9	+11° 515	+55° 324			9	+39° 315	+60° 690	64 2159	10° 0	10	-52° 080	-34° 721	66 1966	9° 6
16	-26° 720	+64° 709	64 2074	9° 0	11	+11° 717	+38° 167	65 2118	10° 0	9	+39° 756	+25° 498			9	-52° 020	-10° 782		
12	-25° 681	+44° 983	65 2077	9° 4	12	+12° 210	+1° 598	65 2119	9° 2	10	+41° 557	+5° 536	65 2151	9° 4	9	-51° 896	-12° 326		
9	-24° 924	+52° 993	64 2075	10° 0	9	+12° 366	+1° 193	65 2120	10° 0	9	+41° 697	+26° 135			9	-51° 609	-43° 944	66 1968	9° 8
20	-24° 632	+52° 345	65 2082	8° 7	14	+12° 520	+18° 066	65 2121	9° 1	9	+42° 366	+63° 306	64 2164	9° 9	9	-51° 490	-28° 071		
	71					131					191					251			
10	-24° 623	+46° 421	65 2081	9° 9	14	+12° 704	+9° 069	65 2123	9° 2	9	+44° 464	+37° 771	65 2153	10° 0	28	-51° 256	-19° 713	66 1969	8° 2
12	-24° 460	+28° 644	65 2080	9° 6	23	+12° 763	+29° 216	65 2122	9° 0	9	+44° 800	+53° 121	64 2172	9° 7	9	-50° 991	-62° 711	66 1967	9° 7
9	-24° 124	+63° 418	64 2076	9° 9	10	+12° 853	+43° 153			9	+44° 892	+45° 171	65 2154	10° 0	10	-50° 626	-6° 541	65 2046	10° 0
12	-23° 741	+53° 758	64 2077	9° 2	9	+13° 328	+60° 588	64 2120	10° 0	9	+44° 893	+45° 160	65 2157	9° 9	9	-50° 307	-25° 177		
9	-23° 106	+61° 281	64 2079	10° 0	10	+13° 825	+33° 325			9	+44° 969	+46° 730	65 2155	9° 9	11	-48° 576	-24° 043	66 1971	9° 6
9	-22° 907	+35° 621			14	+13° 965	+50° 959	65 2124	9° 2	9	+45° 049	+19° 746	65 2158	9° 9	14	-48° 550	-39° 306	66 1970	9° 2
9	-21° 652	+27° 864			9	+14° 252	+62° 933			9	+45° 086	+10° 974	65 2159	9° 9	9	-47° 106	-37° 574	66 1972	10° 0
10	-20° 894	+4° 135	65 2083	9° 5	9	+14° 357	+53° 242			32	+45° 379	+39° 310	65 2156	8° 1	10	-46° 944	-31° 568	66 1974	10° 0
9	-20° 132	+23° 195			9	+14° 516	+36° 153			9	+46° 539	+25° 457	65 2160	9° 8	9	-46° 866	-36° 982	66 1973	10° 0
9	-18° 823	+61° 115	64 2084	10° 0	9	+14° 522	+33° 385			9	+47° 107	+22° 082	65 2161	9° 9	9	-46° 891	-13° 608		
	81					141					201					261			
10	-18° 743	+2° 565	65 2085	9° 7	11	+15° 229	+3° 804	65 2125	9° 5	9	+48° 663	+0° 155	65 2166	9° 8	9	-46° 626	-15° 043		
12	-18° 641	+44° 193	65 2086	9° 9	12	+15° 832	+44° 966	65 2126	9° 3	19	+48° 699	+31° 026	65 2163	9° 2	9	-45° 769	-3° 590		
9	-18° 310	+25° 857			24	+16° 204	+26° 886	65 2127	8° 7	9	+48° 785	+35° 333	65 2164	9° 9	10	-45° 595	-3° 966		
10	-17° 674	+22° 611	65 2087	9° 7	9	+16° 219	+16° 935			9	+48° 901	+64° 697	64 2181	9° 9	15	-45° 133	-23° 775	66 1976	9° 3
30	-17° 321	+54° 230	64 2086	8° 3	9	+16° 402	+45° 742			9	+49° 077	+25° 739	65 2165	9° 8	9	-44° 764	-49° 693		
9	-15° 656	+61° 564			11	+16° 504	+44° 619	65 2128	9° 6	32	+49° 674	+59° 696	64 2186	8° 9	9	-44° 704	-45° 839		
10	-15° 432	+23° 638	65 2089	10° 0	9	+16° 846	+49° 029			11	+49° 859	+34° 719	65 2168	9° 5	9	-44° 075	-62° 470	66 1975	9° 5
9	-15° 273	+54° 900			9	+17° 218	+44° 216			11	+50° 261	+49° 748	65 2167	9° 6	12	-43° 767	-15° 164	66 1978	9° 7
10	-14° 713	+41° 131	65 2090	9° 6	9	+17° 832	+24° 294	65 2129	10° 0	10	+50° 272	+6° 186	65 2171	9° 9	12	-42° 831	-46° 825	66 1977	9° 5
9	-13° 954	+20° 006	65 2091	10° 0	9	+18° 110	+18° 129	65 2130	10° 0	9	+51° 326	+61° 981	64 2191	9° 7	9	-42° 525	-26° 504		
	91					151					211					271			
9	-13° 466	+2° 261			12	+18° 750	+27° 912	65 2131	9° 4	9	+52° 233	+21° 114	65 2172	9° 9	16	-41° 513	-22° 801	66 1979	8° 9
9	-12° 970	+2° 279			9	+18° 774	+1° 854	65 2132	10° 0	15	+52° 617	+20° 674	65 2173	9° 2	9	-41° 427	-16° 609	66 1981	10° 0
9	-12° 347	+41° 995	65 2093	10° 0	9	+19° 262	+22° 106			12	+53° 292	+8° 990	65 2175	9° 5	9	-41° 188	-1° 280		
10	-10° 294	+13° 714	65 2094	9° 8	10	+19° 756	+51° 261	65 2133	10°										

12h 54m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE.																			
13 ^h 12 ^m , - 66°.																			
Plate 312. 1892, June 13.																			
PROVISIONAL CONSTANTS.																			
a = - .01167 d = + .00020																			
b = - .00040 e = - .01145																			
c = - .0339 f = + .0845																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
I4	291	-31.939	66 1987	9.2	28	351	-0.605	66 2028	8.2	I4	411	+36.771	66 2068	9.3	I2	-64.628	+30.287	65 2163	9.2
I4	-31.822	-3.621	65 2072	9.2	9	+0.721	-20.158			II	+36.788	-24.614	66 2069	9.8	9	-64.422	+49.107	65 2167	9.6
9	-31.602	-4.799			10	+2.231	-11.147	66 2029	9.6	16	+37.818	-19.536	66 2070	8.8	9	-64.263	+61.365	64 2191	9.7
I2	-29.777	-30.178	66 1988	9.5	9	+3.954	-40.151			10	+37.770	-57.589	66 2072	9.8	9	-64.147	+24.910	65 2165	9.8
9	-29.543	-33.319	66 1989	10.0	9	+3.980	-47.739			10	+38.484	-62.721	66 2073	9.6	9	-63.740	+34.056	65 2168	9.5
9	-28.562	-42.467	66 1991	10.0	20	+4.428	-64.674	66 2030	8.9	24	+39.835	-26.161	66 2075	8.6	9	-61.284	+5.656	65 2171	9.9
9	-28.543	-2.218			15	+4.664	-59.861	66 2031	9.2	12	+39.866	-11.647	66 2074	9.6	9	-60.782	+20.660	65 2172	9.9
18	-28.277	-58.834	66 1990	9.1	I4	+4.794	-41.411	66 2032	9.9	9	+40.232	-51.248	66 2076	9.9	I4	-59.987	+20.243	65 2173	9.2
9	-27.749	-18.513	66 1992	10.0	9	+5.646	-34.958			10	+41.484	-1.545	65 2152	9.8	9	-59.521	+34.966	65 2176	9.6
9	-27.474	-48.870			10	+6.461	-15.989	66 2033	9.5	9	+41.617	-51.582	66 2078	9.9	I4	-59.517	+30.807	65 2174	9.1
9	-26.230	-46.066			9	+7.902	-53.331			9	+41.781	-12.458	66 2077	9.9	II	-58.465	+8.652	65 2175	9.5
9	-25.939	-18.782			9	+8.713	-7.576			10	+42.912	-18.718	66 2079	9.6	9	-58.436	+22.231	65 2178	9.8
16	-25.636	-44.714	66 1993	9.2	18	+9.081	-45.408	66 2034	9.2	15	+43.219	-42.310	66 2080	9.4	9	-57.803	+52.703	64 2204	9.9
I4	-25.296	-15.195	66 1997	9.2	10	+9.574	-21.696	66 2035	9.6	9	+44.807	-28.921			9	-57.562	+38.678	65 2179	9.9
9	-25.214	-7.223			10	+10.498	-57.035	66 2036	10.0	9	+45.880	-40.475			9	-56.780	+38.986	65 2182	9.9
II	-25.194	-14.753	66 1996	9.7	9	+11.026	-21.917			9	+46.034	-57.649	66 2082	9.6	II	-56.586	+18.288	65 2180	9.4
27	-25.149	-25.330	66 1995	8.8	16	+11.403	-10.184	66 2038	8.9	10	+46.714	-6.429	65 2162	9.7	9	-55.403	+44.589	65 2183	9.7
9	-25.064	-15.556	66 1998	10.0	18	+11.506	-54.482	66 2039	9.1	9	+47.637	-53.741	66 2084	9.9	9	-54.166	+48.202	65 2184	9.9
I3	-24.874	-45.994	66 1994	9.4	I4	+12.075	-14.760	66 2040	9.0	9	+48.807	-12.934	66 2083	9.9	9	-53.794	+52.075	64 2211	9.5
12	-24.595	-3.937	65 2078	9.4	10	+12.142	-35.341	66 2041	9.4	9	+49.121	-51.123	66 2086	9.7	9	-52.778	+50.758	65 2185	9.5
20	-24.193	-60.856	66 1999	9.1	9	+12.639	-13.235	66 2042	10.0	II	+49.218	-1.438	65 2169	9.7	22	-50.216	+50.792	65 2187	9.0
I4	-23.901	-1.050	65 2079	9.2	9	+12.733	-45.415			15	+49.219	-29.032	66 2085	9.3	9	-49.383	+6.438	65 2186	9.8
10	-23.795	-49.682	66 2000	9.7	9	+13.334	-2.454			10	+49.900	-0.200	65 2170	9.8	9	-48.429	+31.268	65 2188	9.3
9	-22.501	-24.145	66 2003	10.0	9	+13.350	-61.699			12	+51.467	-33.576	66 2088	9.5	9	-47.445	+49.098	65 2189	9.9
9	-22.338	-36.964			9	+14.042	-46.721			9	+52.026	-42.742	66 2089	9.8	9	-46.966	+61.090	64 2226	9.7
20	-21.985	-60.852	66 2002	8.9	10	+14.776	-59.344	66 2044	9.9	9	+52.792	-3.831	65 2177	9.9	10	-46.211	+48.290	65 2191	9.6
10	-21.635	-57.675	66 2004	9.8	9	+15.495	-52.040			9	+54.472	-60.241	66 2090	9.8	10	-46.143	+19.306	65 2190	9.5
I4	-21.074	-47.985	66 2005	9.8	9	+16.801	-44.795			16	+55.688	-28.268	66 2091	9.3	9	-44.683	+14.241	65 2192	9.9
I3	-20.578	-45.928	66 2006	9.4	10	+17.549	-63.799	66 2046	10.0	24	+55.757	-1.503	65 2181	8.7	9	-44.458	+50.575	65 2193	9.9
I2	-19.665	-11.477	66 2007	9.2	9	+17.553	-36.291	66 2045	10.0	9	+55.905	-37.383			9	-42.328	+50.249	65 2194	9.9
10	-19.048	-37.070	66 2008	10.0	10	+18.666	-16.489	66 2047	9.5	16	+56.746	-62.808	66 2093	9.0	9	-39.678	+32.164	65 2196	9.8
9	-18.895	-7.213	65 2084	9.9	9	+20.159	-55.499	66 2049	10.0	II	+57.628	-57.754	66 2095	9.4	9	-39.329	+22.314	65 2198	9.5
22	-17.924	-40.753	66 2009	8.9	9	+20.642	-8.827	66 2048	9.8	28	+57.810	-12.878	66 2092	8.5	10	-39.147	+33.484	64 2240	9.9
I2	-16.625	-37.262	66 2010	9.4	I3	+20.867	-53.443	66 2051	9.6	9	+58.632	-19.966	66 2094	9.9	9	-38.913	+11.359	65 2197	9.3
9	-16.034	-44.805			12	+20.938	-17.635	66 2050	9.4	12	+60.128	-22.687	66 2096	9.4	9	-38.830	+63.832	64 2243	9.9
9	-15.576	-6.076	65 2088	10.0	9	+22.157	-9.282			I4	+61.887	-63.929	66 2104	9.2	9	-38.495	+53.008	64 2244	9.5
16	-14.438	-58.405	66 2011	9.1	9	+23.978	-36.998			9	+61.986	-62.802	66 2102	9.6	9	-38.368	+21.944	65 2199	9.8
9	-14.314	-18.236	66 2012	10.0	9	+24.773	-56.454			9	+62.062	-59.557	66 2103	9.6	9	-37.558	+60.586	64 2246	9.7
10	-13.192	-32.448	66 2013	10.0	10	+25.010	-35.995	66 2052	9.9	9	+62.826	-58.424	66 2105	9.9	II	-37.312	+52.614	64 2247	9.2
9	-13.003	-28.579	66 2014	10.0	10	+25.477	-18.773	66 2053	9.8	9	+63.018	-28.582	66 2101	9.8	9	-36.777	+28.855	65 2200	9.8
I4	-12.862	-41.502	66 2015	9.3	18	+25.938	-19.367	66 2054	8.8	12	+63.137	-11.417	66 2100	9.5	9	-36.661	+57.743	64 2254	9.9
II	-12.768	-38.976	66 2016	9.6	9	+29.960	-48.648	66 2057	10.0	9	+63.842	-51.275	66 2109	9.9	42	-36.236	+17.965	65 2201	6.6
II	-12.407	-0.292	65 2092	9.2	II	+30.050	-50.301	66 2058	9.9	II	+64.218	-40.372	66 2107	9.5	22	-36.005	+54.215	64 2256	9.0
18	-12.164	-49.851	66 2018	9.2	9	+30.772	-18.579			I3	+64.588	-15.395	66 2106	9.4	9	-35.946	+57.911	64 2257	9.7
I4	-11.620	-50.864	66 2019	9.5	9	+31.096	-39.127			12	+64.639	-30.145	66 2108	9.6	9	-35.704	+50.904	65 2203	9.9
18	-11.458	-56.381	66 2020	9.1	9	+31.341	-42.261			9	+63.842	-51.275	66 2109	9.9	10	-35.638	+38.732	65 2202	9.5
9	-8.092	-3.825	65 2098	10.0	9	+31.388	-39.047			II	+64.218	-40.372	66 2107	9.5	9	-34.917	+55.800	64 2259	9.8
9	-7.334	-29.747	66 2021	10.0	15	+32.235	-42.023	66 2059	9.2	9	+64.588	-15.395	66 2106	9.4	9	-34.688	+7.046		
9	-7.238	-37.670			9	+33.792	-27.735			9	+64.639	-30.145			9	-31.624	+45.960	65 2206	9.9
I4	-6.830	-40.437	66 2022																

RECTANGULAR CO-ORDINATES.

13^h 12^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
10	-31°617	+59°843	64 2271	9°6	9	+3°941	+8°714	65 2254	9°8	9	+28°777	+53°000	64 2377	9°7	12	-59°770	-29°562	66 2085	9°3
9	-31°593	+17°543	65 2204	9°9	12	+5°618	+0°260	65 2255	9°2	9	+29°502	+19°049	65 2305	9°9	9	-58°349	-51°592	66 2086	9°7
9	-31°380	+48°426	65 2209	9°9	9	+5°969	+60°394	64 2344	9°8	9	+30°116	+58°323	64 2381	9°9	9	-58°049	-4°149	65 2177	9°9
18	-30°994	+27°770	65 2207	9°0	9	+6°334	+32°670	65 2257	9°9	9	+30°194	+20°320			9	-57°911	-57°835	66 2087	9°9
18	-30°753	+0°194	65 2205	9°0	10	+6°450	+28°614	65 2256	9°9	9	+30°411	+14°636	65 2306	9°6	10	-57°256	-33°932	66 2088	9°5
10	-30°466	+46°024	65 2210	9°6	18	+6°610	+36°887	65 2258	8°8	10	+30°504	+14°841	65 2307	9°6	9	-56°055	-43°026	66 2089	9°8
9	-30°395	+58°072	64 2273	9°9	9	+7°041	+53°429	64 2346	9°9	10	+30°759	+57°131	64 2382	9°6	20	-55°265	-1°630	65 2181	8°7
24	-29°590	+34°430	65 2211	8°9	9	+7°086	+26°463			9	+33°319	+20°617	65 2308	9°9	14	-53°428	-28°334	66 2091	9°3
9	-29°133	+55°664	64 2278	9°8	9	+7°386	+51°445	65 2259	9°9	10	+33°459	+27°657	65 2309	9°7	24	-52°406	-12°839	66 2092	8°5
9	-28°885	+36°757	65 2212	9°8	9	+7°728	+37°998	65 2260	9°9	13	+34°881	+53°348	64 2387	9°0	9	-52°359	-60°272	66 2090	9°8
	61					121					181					241			
9	-28°731	+36°299	65 2213	9°9	9	+7°755	+22°803			9	+35°147	+15°519	65 2311	9°9	9	-51°073	-19°848	66 2094	9°9
9	-28°062	+28°340	65 2214	9°7	10	+7°985	+31°554	65 2261	9°5	9	+36°313	+9°596	65 2313	9°9	13	-49°884	-62°705	66 2093	9°0
9	-27°873	+31°065	65 2215	9°9	9	+9°277	+24°562	65 2262	9°9	9	+36°335	+11°637	65 2312	9°9	12	-49°392	-22°456	66 2096	9°4
9	-27°369	+55°215			10	+9°890	+40°552	65 2263	9°5	13	+37°749	+34°909	65 2314	9°1	10	-49°391	-57°610	66 2095	9°4
9	-27°341	+38°099			9	+10°093	+29°261	65 2265	9°9	9	+38°424	+61°986	64 2390	9°8	11	-47°205	-10°986	66 2100	9°5
10	-27°205	+29°648	65 2216	9°7	10	+10°100	+49°579	65 2264	9°5	10	+38°585	+37°334	65 2315	9°5	9	-47°129	-56°659	66 2098	9°9
10	-26°819	+50°984	65 2218	9°6	9	+10°886	+44°924	65 2266	9°6	15	+38°651	+57°629	64 2391	9°1	9	-46°091	-28°107	66 2101	9°8
10	-26°211	+15°269	65 2217	9°4	9	+11°203	+31°266			9	+39°113	+33°721			9	-45°697	-4°247		
11	-25°841	+51°005	65 2219	9°3	9	+11°540	+60°743	64 2353	9°9	9	+39°185	+25°711	65 2316	9°9	12	-45°499	-14°764	66 2106	9°4
9	-24°952	+6°674	65 2220	9°9	17	+11°631	+25°401	65 2268	9°0	17	+39°646	+3°495	65 2318	9°0	9	-44°836	-59°071	66 2103	9°6
	71					131					191					251			
11	-24°720	+52°807	64 2285	9°4	9	+12°396	+47°475	65 2269	9°9	9	+39°855	+16°605			13	-44°685	-63°460	66 2104	9°2
10	-20°559	+30°636	65 2226	9°6	10	+13°135	+10°413	65 2271	9°5	16	+40°198	+36°503	65 2317	8°9	9	-44°681	-62°312	66 2102	9°6
9	-20°137	+30°962	65 2227	9°8	9	+13°212	+10°857	65 2272	9°9	10	+40°378	+26°340	65 2319	9°7	11	-44°366	-29°565	66 2108	9°6
9	-18°825	+62°713	64 2302	9°9	11	+13°383	+62°791	64 2355	9°4	12	+41°631	+13°519	65 2321	9°3	9	-44°194	-57°908	66 2105	9°9
9	-17°496	+50°398			15	+15°039	+59°111	64 2356	9°0	10	+41°809	+28°785	65 2320	9°6	10	-44°086	-39°784	66 2107	9°5
11	-17°248	+22°241	65 2228	9°3	9	+15°227	+24°205	65 2274	9°9	9	+44°215	+17°405	65 2323	9°9	9	-43°713	-6°736		
15	-17°139	+45°200	65 2230	9°2	10	+15°342	+23°875	65 2275	9°5	10	+45°189	+35°869	65 2324	9°5	9	-43°652	-50°692	66 2109	9°9
10	-16°913	+3°144	65 2229	9°5	10	+16°139	+5°741	65 2276	9°5	9	+47°280	+28°926	65 2327	9°8	9	-42°954	-18°508	66 2111	9°9
9	-15°897	+62°220	64 2305	9°9	9	+16°661	+32°595	65 2277	9°9	9	+47°391	+36°619	65 2326	9°9	18	-41°890	-57°361	66 2110	8°9
10	-14°625	+20°867	65 2233	9°4	13	+17°371	+1°815	65 2278	9°2	9	+48°122	+28°685			9	-40°890	-51°668	66 2112	9°9
	81					141					201					261			
9	-13°750	+47°300	65 2234	9°5	9	+17°722	+62°668	64 2361	9°9	24	+48°909	+40°255	65 2329	8°4	17	-40°482	-56°299	66 2113	9°0
10	-13°470	+34°320	65 2235	9°7	26	+18°130	+29°645	65 2279	8°4	14	+49°142	+52°625	64 2402	9°1	9	-39°978	-47°843	66 2114	9°8
9	-12°722	+17°929	65 2236	9°7	9	+18°447	+48°944	65 2280	9°2	9	+49°360	+52°026	64 2403	9°6	9	-39°556	-3°496	65 2195	9°8
11	-11°997	+24°129	65 2237	9°3	10	+18°507	+48°944			9	+50°149	+25°894			9	-39°293	-11°334	66 2115	9°7
9	-10°860	+14°532			9	+18°646	+30°928	65 2281	9°9	9	+51°015	+49°314	65 2330	9°8	11	-39°178	-8°660	66 2116	9°5
14	-10°069	+55°951	64 2319	9°2	9	+18°778	+56°717			9	+51°290	+16°744	65 2332	9°9	9	-37°141	-52°742	66 2117	9°9
9	-8°590	+44°676	65 2238	9°9	9	+18°975	+50°430	65 2282	9°9	11	+52°205	+47°056	65 2331	9°2	9	-36°954	-18°575		
9	-7°664	+47°942			9	+19°195	+15°215	65 2284	9°9	9	+55°142	+7°374	65 2333	9°9	9	-36°489	-52°680	66 2118	9°8
10	-6°948	+9°112	65 2240	9°8	14	+19°374	+29°571	65 2283	9°1	9	+55°287	+9°910			12	-35°567	-34°519	66 2119	9°4
11	-6°772	+11°069	65 2241	9°3	11	+19°442	+54°930	64 2365	9°4	9	+55°635	+10°298	65 2334	9°9	9	-33°871	-54°471	66 2120	9°7
	91					151					211					271			
9	-6°374	+53°467	65 2234	9°5	18	+19°714	+35°930	65 2285	8°8	9	+56°464	+56°227	64 2409	9°9	10	-33°013	-48°932	66 2121	9°7
9	-6°128	+22°975	65 2235	9°7	9	+19°721	+34°623	65 2286	9°8	20	+57°284	+13°382	65 2335	8°9	11	-31°530	-22°941	66 2122	9°5
9	-5°050	+36°008			9	+20°275	+9°221	65 2288	9°8	15	+57°324	+8°994	65 2336	9°0	16	-30°290	-4°301	65 2208	9°3
10	-4°764	+53°315	64 2329	9°5	9	+21°045	+33°189			12	+59°867	+22°633							

13^h 12^m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
9	291	-17°245	-22°101		9	351	+21°119	-51°304	66 2178	9°9	9	411	+58°583	-56°096	66 2230	9°9	PLATE CENTRE.			
12	-17°217	-13°293	66 2131	9°5	10	+21°877	-4°898	65 2294	9°3	9	+59°324	-26°810	66 2229	9°9	9	13 ^h 30 ^m , - 66°.				
10	-16°351	-4°402	65 2231	9°5	10	+24°233	-15°050	66 2180	9°8	9	+60°080	-62°121	66 2232	9°5	9	Plate 742. 1893, June 6.				
10	-16°306	-0°157	65 2232	9°7	9	+24°907	-40°907	66 2181	9°9	22	+60°196	-28°566	66 2231	9°0	9	PROVISIONAL CONSTANTS.				
10	-16°157	-39°312	66 2132	9°6	10	+25°806	-48°739	66 2183	9°7	9	+60°787	-54°077	66 2233	9°6	9	a = - 0.01140	d = + 0.00028			
9	-15°893	-1°163			10	+26°076	-27°915	66 2182	9°6	10	+61°311	-6°249	65 2341	9°6	9	b = - 0.00019	e = - 0.01135			
9	-15°181	-34°872	66 2134	9°7	10	+27°113	-55°152	66 2184	9°7	9	+61°804	-41°272	66 2234	9°6	9	c = - 0.0334	f = - 0.0807			
9	-14°540	-58°638	66 2135	9°7	9	+27°137	-14°774			10	+63°125	-11°897	66 2235	9°7	9	To obtain standard co-ordinates, ξ, η				
11	-13°279	-42°743	66 2137	9°3	10	+28°445	-19°445	66 2185	9°7	10	+63°802	-51°843	66 2236	9°3	9	ξ = x + ax + by + c				
10	-13°174	-55°301	66 2138	9°8	13	+28°887	-55°693	66 2186	9°2	9	+63°941	-3°104			9	η = y + dx + ey + f				
14	301	-12°298	-23°717	66 2139	9°4	10	361	+29°133	-56°056	66 2187	9°5				9	-63°670	+49°072	65 2330	9°8	
10	-11°782	-61°973	66 2140	9°6	18	+31°101	-20°255	66 2188	9°2						9	-62°833	+25°645			
9	-10°088	-62°695	66 2141	9°6	9	+31°211	-41°195	66 2190	9°9						11	-62°318	+46°897	65 2331	9°2	
52	-9°279	-15°606	66 2142	7°4	10	+31°276	-30°341	66 2189	9°7						9	-61°040	+16°596	65 2332	9°9	
9	-9°170	-37°000	66 2143	9°8	9	+31°329	-14°070								9	-60°225	+54°981	64 2409	9°9	
11	-8°702	-54°695	66 2144	9°5	9	+31°536	-49°750	66 2191	9°9						11	-57°048	+6°991			
14	-8°487	-64°769	66 2145	9°2	28	+31°655	-48°541	66 2192	7°7						10	-56°560	+10°065			
24	-6°907	-25°964	66 2146	9°0	15	+31°891	-46°666	66 2193	9°0						9	-56°514	+7°527	65 2333	9°9	
10	-6°896	-0°764	65 2239	9°8	10	+32°635	-22°341	66 2194	9°8						10	-56°279	+10°459	65 2334	9°9	
9	-5°647	-24°915	66 2148	9°8	9	+33°854	-5°175								18	-54°831	+13°687	65 2335	8°9	
10	311	-5°636	-26°225	66 2147	9°6	9	371	+33°989	-51°419	66 2196	9°9				17	-54°480	+9°303	65 2336	9°0	
10	-5°132	-25°642	66 2150	9°5	9	+34°297	-1°882	65 2310	9°9						15	-52°926	+23°062	65 2337	9°2	
21	-5°084	-55°299	66 2149	9°1	9	+34°301	-1°638								9	-52°331	+52°995	64 2414	9°9	
10	-4°936	-21°974	66 2151	9°6	13	+34°558	-9°370	66 2195	9°3						11	-51°809	+28°501	65 2339	9°5	
9	-4°613	-33°400			9	+35°577	-50°841	66 2198	9°7						11	-51°257	+18°151	65 2340	9°7	
10	-3°872	-28°970	66 2152	9°9	14	+35°693	-46°613	66 2199	9°2						15	-51°083	+10°566	65 2338	9°2	
11	-3°334	-56°659	66 2153	9°5	11	+35°895	-20°344	66 2197	9°5						9	-50°490	+56°872	64 2416	9°6	
9	-2°346	-8°968	66 2154	9°8	14	+36°053	-48°778	66 2200	9°1						9	-50°395	+17°047			
9	-1°461	-15°433	66 2155	9°9	10	+36°452	-64°783	66 2201	9°4						9	-50°184	+50°625	65 2342	9°9	
13	-1°154	-19°231	66 2156	9°3	9	+37°357	-64°139	66 2204	9°8						16	-49°092	+58°049	64 2417	9°5	
9	321	+0°085	-59°854	66 2157	9°7	9	381	+37°765	-39°931	66 2202	9°6				20	-48°870	+26°299	65 2343	8°8	
12	+1°108	-51°950	66 2158	9°5	9	+37°995	-2°259								17	-48°520	+26°019	65 2344	9°1	
9	+1°357	-21°901	66 2159	9°9	9	+38°033	-51°785	66 2205	9°8						10	-47°955	+12°031	65 2345	9°9	
9	+1°412	-38°973			9	+38°243	-58°850	66 2206	9°9						9	-45°892	+34°079			
9	+1°738	-47°782			9	+38°546	-12°120	66 2203	9°7						9	-45°865	+29°040			
9	+2°202	-46°016			10	+39°651	-33°020	66 2207	9°7						9	-45°714	+55°278	64 2425	9°9	
9	+3°066	-38°010			9	+39°927	-55°578	66 2211	9°9						10	-45°701	+63°042	64 2427	9°2	
11	+3°292	-19°818	66 2162	9°5	15	+40°026	-44°200	66 2209	9°1						24	-44°821	+61°135	64 2428	7°9	
11	+4°902	-15°605	66 2163	9°5	9	+40°761	-12°483	66 2208	9°8						9	-44°781	+5°168			
38	+5°309	-50°951	66 2164	7°5	9	+40°863	-44°212	66 2212	9°8						9	-44°310	+13°031			
9	331	+5°472	-26°647	66 2165	9°9	9	391	+42°239	-26°201	66 2213	9°9				9	-44°094	+12°823			
9	+7°518	-22°701			9	+42°948	-0°029								10	-43°502	+28°655			
11	+7°607	-32°226	66 2166	9°6	9	+43°047	-5°228	65 2322	9°9						12	-43°464	+12°205	65 2346	9°5	
19	+10°661	-0°437	65 2267	9°0	17	+44°264	-14°423	66 2214	9°2						9	-43°401	+6°090			
13	+11°275	-59°097	66 2167	9°3	19	+45°476	-3°998	65 2325	8°7						13	-42°110	+7°366	65 2347	9°5	
11	+11°665	-18°543	66 2168	9°6	9	+46°449	-3°065	65 2328	9°9						10	-42°104	+46°661	65 2349	9°9	
9	+12°511	-30°804	66 2169	9°7	11	+46°971	-40°334	66 2216	9°5						9	-40°913	+53°099	64 2430	9°9	
17	+12°875	-2°830	65 2270	9°0	11	+47°414	-57°448	66 2217	9°5						10	-40°291	+8°982	65 2350	9°9	
9	+14°100	-29°445	66 2170	9°8	9	+47°524	-56°219	66 2219	9°5						14	-40°026	+12°861	65 2351	9°4	
11	+14°363	-8°003	65 2273	9°5	9	+47°804	-52°595	66 2220	9°8						10	-39°783	+25°066			
42	341	+15°330	-61°602	66 2171	7°3	9	401	+47°872	-40°991	66 2218	9°9				9	-39°769	+38°330	65 2352	9°9	
9	+15°907	-10°135	66 2172	9°7	26	+49°522	-31°385	66 2222	8°9						10	-39°494	+21°528			
9	+17°691	-22°890	66 2173	9°8	9	+49°684	-20°121	66 2221	9°9						10	-39°295	+19°323			
9	+17°895	-17°741	66 2174	9°9	14	+51°209	-19°827	66 2223	9°2						9	-39°288	+17°641			
10	+18°939	-46°597	66 2176	9°7	10	+51°479	-34°253	66 2225	9°6						9	-39°093	+38°910			
15	+19°035	-51°515	66 2177	9°2	30	+51°727	-14°762	66 2224	8°0						9	-38°551	+38°854			
9	+20°060	-3°464	65 2287	9°9	14	+52°669	-12°734	66 2226	9°3						10	-38°011	+11°189			
10	+20°461	-7°544	65 2289	9°8	9	+54°222	-61°908	66 2227	9°6						10	-37°881	+60°811	64 2436	9°4	
14	+20°512	-4°742	65 2290	9°3	9	+56°694	-0°883								11	-36°821	+31°210	65 2353	9°9	
9	+21°085	-4°620	65 2292	9°9	9	+57°865	-58°592	66 2228	9°5						9	-36°411	+9°780			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
9	-36°195	+14°865			9	-0°578	+4°210	65 2389	9°9	9	+25°271	+24°266			9	+49°531	+51°367	65 2449	9°9
9	-36°021	+38°748			9	+0°068	+54°787			9	+25°749	+20°814			9	+52°775	+44°395		
10	-35°423	+22°830			10	+0°729	+43°872	65 2391	9°9	9	+25°826	+24°244			9	+53°140	+19°451		
16	-35°270	+49°094	65 2355	9°1	14	+0°932	+44°484	65 2392	9°3	9	+26°370	+25°702			10	+53°166	+32°607		
10	-35°226	+39°670	65 2354	9°9	9	+1°294	+17°395			13	+26°390	+24°555	65 2423	9°7	10	+54°277	+37°932		
17	-34°448	+15°886	65 2356	9°0	10	+1°302	+30°576	65 2393	9°9	15	+26°417	+7°254	65 2424	9°3	11	+55°309	+34°402	65 2451	9°8
17	-34°373	+16°579	65 2357	9°0	9	+2°358	+5°828	65 2394	9°9	13	+26°689	+16°400	65 2425	9°5	9	+55°347	+32°015		
10	-33°974	+11°225			11	+3°150	+22°606	65 2395	9°8	10	+27°293	+55°355	64 2513	9°7	11	+56°125	+33°374	65 2452	9°7
10	-31°530	+41°080			11	+3°396	+63°454	64 2488	9°5	10	+27°550	+15°740			9	+57°420	+55°925	64 2545	9°8
11	-31°298	+64°298	64 2442	9°3	9	+4°571	+50°057			14	+27°654	+33°085	65 2426	9°3	10	+57°617	+1°249		
	61					121					181					241			
11	-30°590	+49°779	65 2359	9°9	10	+4°712	+50°081	65 2396	9°9	9	+28°635	+52°061			10	+57°652	+44°373	65 2453	9°6
10	-29°621	+10°922			16	+4°780	+14°795	65 2397	9°2	9	+29°502	+33°762			14	+58°402	+38°738	65 2454	9°2
12	-29°224	+24°626	65 2360	9°6	11	+4°955	+26°786	65 2398	9°8	12	+29°619	+25°973	65 2427	9°7	9	+58°424	+38°710		
14	-28°661	+23°355	65 2362	9°4	28	+5°366	+17°056	65 2399	8°5	9	+29°652	+19°612			11	+59°176	+10°785	65 2455	9°7
16	-28°507	+27°194	65 2363	9°3	9	+7°498	+13°777			10	+30°699	+64°408	64 2516	9°6	13	+59°784	+55°731	64 2550	9°1
10	-28°485	+8°156	65 2361	9°9	9	+8°328	+14°842			12	+30°780	+29°977	65 2428	9°7	9	+60°281	+56°262	64 2551	9°8
9	-27°451	+18°111			13	+8°626	+31°322			10	+31°352	+39°100			9	+61°898	+34°264		
11	-26°041	+16°921	65 2365	9°5	19	+8°803	+64°236	64 2493	8°4	9	+32°878	+4°860			9	+62°312	+28°337		
9	-25°815	+43°802			16	+9°305	+12°214	65 2401	9°2	10	+32°992	+6°946	65 2430	9°9	12	+64°690	+14°630	65 2457	9°6
15	-25°740	+30°293	65 2367	9°5	9	+9°637	+33°348	65 2402	9°7	11	+33°034	+4°804	65 2432	9°8	9	-64°455	-3°505	65 2328	9°9
	71					131					191					251			
13	-25°355	+8°070	65 2366	9°4	10	+11°003	+45°706	65 2403	9°7	9	+33°072	+38°948	65 2429	9°9	12	-61°269	-40°646	66 2216	9°5
9	-24°165	+10°608			13	+11°959	+43°715	65 2505	9°4	9	+33°210	+28°917			9	-60°333	-41°242	66 2218	9°9
12	-23°345	+58°909	64 2459	9°4	14	+12°795	+45°307	65 2406	9°3	14	+33°426	+28°636	65 2431	9°5	10	-60°024	-20°285	66 2221	9°9
9	-22°485	+30°918			9	+12°906	+34°093			10	+33°439	+46°096			11	-59°591	-57°665	66 2217	9°5
10	-22°350	+32°723			10	+14°533	+59°368	64 2501	9°7	15	+33°533	+13°113	65 2433	9°3	9	-59°590	-56°445	66 2219	9°5
9	-21°803	+51°777			11	+14°784	+33°667	65 2408	9°9	10	+33°800	+27°963			9	-59°514	-52°784	66 2220	9°8
42	-21°512	+53°497	64 2465	6°7	12	+17°636	+59°958	64 2505	9°3	9	+34°177	+41°453			32	-59°369	-31°537	66 2222	8°9
10	-21°337	+44°714	65 2368	9°9	18	+17°693	+33°387	65 2410	9°2	9	+34°216	+31°723			13	-58°507	-19°900	66 2223	9°2
9	-20°814	+46°411			12	+18°059	+18°297	65 2411	9°5	10	+34°628	+28°624			32	-58°357	-14°808	66 2224	8°0
10	-20°772	+46°289	65 2370	9°8	12	+18°257	+0°982	65 2413	9°7	16	+35°041	+55°494	64 2519	8°9	13	-57°567	-12°701	66 2226	9°3
	81					141					201					261			
20	-20°395	+8°876	65 2369	8°6	14	+18°379	+51°731	65 2412	9°5	10	+35°184	+16°331			10	-57°201	-34°257	66 2225	9°6
9	-20°100	+12°652			9	+18°495	+10°094			13	+35°449	+50°116	65 2434	9°5	10	-52°483	-61°639	66 2227	9°6
36	-19°991	+26°418	65 2371	7°1	12	+18°619	+1°770	65 2414	9°7	13	+35°966	+34°588	65 2436	9°9	10	-49°939	-26°252	66 2229	9°9
9	-19°662	+48°135	65 2372	9°7	9	+19°003	+33°521			9	+36°813	+32°347			11	-49°427	-5°603	65 2341	9°6
14	-19°647	+56°521	64 2467	9°2	10	+19°021	+49°595	65 2415	9°8	10	+36°823	+25°883			10	-49°091	-58°060	66 2228	9°5
11	-17°695	+37°455	65 2374	9°9	9	+19°256	+38°787			18	+37°667	+22°285	65 2437	9°0	21	-48°923	-27°954	66 2231	9°0
18	-17°614	+52°698	65 2375	8°9	10	+19°334	+42°789			9	+38°103	+20°352			10	-48°597	-55°521	66 2230	9°9
14	-17°269	+32°927	65 2376	9°5	9	+19°646	+49°766			11	+38°978	+38°882			12	-47°203	-11°116	66 2235	9°7
9	-16°574	+60°376			9	+20°057	+25°906			19	+39°005	+0°424	65 2439	9°0	10	-46°666	-61°396	66 2232	9°5
13	-16°202	+27°172	65 2377	9°5	9	+20°319	+58°027			14	+39°496	+21°412	65 2441	9°5	11	-46°510	-53°338	66 2233	9°6
	91					151					211					271			
9	-14°584	+24°424			9	+20°903	+24°736			12	+39°548	+16°779	65 2442	9°7	11	-46°440	-40°515	66 2234	9°6
14	-14°291	+28°947			14	+21°326	+20°936	65 2416	9°5	10	+39°907	+44°198			11	-43°840	-23°243	66 2237	9°7
12	-13°321	+40°652	65 2378	9°6	10	+21°442	+9°814			10	+39°921	+36°131	65 2440	9°9	12	-43°679	-50°887	66 2236	9°3
14	-11°828	+25°111	65 2380	9°5	10	+21°747	+39°580			12	+40°146	+62°062	64 2524	9°2	10	-42°976	-18°053		
9	-11°466	+28°462	65 2381	9°3	9	+21°775	+51°175			14	+40°335	+42°122	65 2443	9°4	10	-41°231	-13°887		
12	-10°543	+43°111	65 2383	9°7	12	+21°830	+4°670	65 2417	9°9	9	+40°603	+45°156			14	-41°088	-31°249	66 2238	9°2
13	-10°392	+1°554	65 2382	9°5	9	+21°973	+29°664			10	+41°804	+16°105			12	-41°078	-3°530	65 2348	9°7
16	-10°359	+32°874	65 2384	9°1	9	+22°263	+11°544			9	+43°564	+59°337	64 2529	9°9	11	-38°481	-36°481	66 2239	9°6
10	-9°444	+21°578	65 2385	9°9	15	+22°305	+29°312	65 2418	9°5	10	+44°755	+31°371			11	-38°058	-47°031	66 2240	9°7
11	-8°732	+5°905	65 2386	9°6	10	+22°347	+30°462			11	+45°795	+45°576	65 2444	9°6	10	-36°954	-37°929	66 2241	9°9
	101					161					221					281			
9	-8°196	+6°095			10	+22°469	+34°052			9	+45°818	+5°701			11	-36°564	-49°314	66 2242	9°6
9	-8°064	+42°701			10	+23°283	+31°648			9	+45°919	+35°765			12	-34°610	-33°702	66 2243	9°5
10	-6°715	+59°888	64 2479	9°9	10	+23°322	+3°088			10	+45°944	+42°676	65 2415	9°7	9	-34°398	-18°331		
10	-6°050	+50°992			10	+23°368	+35°127			10	+46°026	+14°802			11	-34°306	-28°661	66 2244	9°9
9	-5°838	+6°282			9	+23°469	+35°825			10	+47°163	+34°031			22	-33°782	-3°993	65 2358	8°8
9	-5°784	+17°667	65 2387	9°9	11	+24°028	+5°588	65 2421	9°7	13	+47°497	+45°376	65 2446	9°3	14	-31°760	-55°128	66 2245	9°3
9	-5°702	+17°931			9	+24°098	+36°016			10	+48°342	+3°505			9	-31°125	-23°283	66 2247	9°9
9	-5°144	+22°884			9	+24°135	+63°265			9	+48°769	+3°385			12	-31°090	-50°579	66 2246	9°4
9	-2°736	+18°243			11	+24°439	+22°418			11	+48°964	+9°844	65 2450	9°7	30	-30°115	-64°282	66 2248	8°3
10	-1°508	+3°498			20	+24°560	+10°985	65 2422	8°7	11	+49°018	+51°773	65 2447	9°4	11	-28°458	-57°764	66 2249	9°5

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,				PLATE CENTRE. 13 ^h 48 ^m , - 66°. Plate 301. 1892, May 27. PROVISIONAL CONSTANTS. $a = - '01207$ $d = + '00108$ $b = - '00129$ $e = - '01210$ $c = - '0724$ $f = - '0105$ To obtain standard co-ordinates, ξ, η . $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51,				
24	-28°009	-64°804	66 2250	9°1	11	+23°100	-54°694	66 2287	9°7	20	-23°709	+43°785	65 2488	8°8					
12	-26°290	-1°510	65 2364	9°6	12	+24°334	-44°208	66 2289	9°4	9	-22°905	+15°157							
12	-25°458	-10°335	66 2251	9°5	12	+24°343	-11°355	66 2288	9°7	11	-21°811	+4°947	65 2490	9°6					
10	-24°347	-3°304			9	+24°972	-13°174			9	-21°733	+37°615	65 2491	9°9					
10	-23°227	-58°484	66 2252	9°7	11	+25°582	-36°963			9	-20°687	+11°879							
11	-23°159	-55°012	66 2253	9°9	10	+26°658	-13°713	66 2290	9°9	9	-20°455	+2°564							
9	-23°019	-58°451	66 2254	9°7	11	+28°202	-42°583	66 2291	9°8	9	-20°419	+11°144							
10	-21°466	-2°390			10	+28°303	-16°115			12	-20°405	+33°974	65 2492	9°5					
21	-20°483	-13°315	66 2255	9°0	9	+29°038	-42°343			9	-20°289	+62°193	64 2593	9°6					
12	-19°103	-25°789	66 2256	9°5	10	+29°218	-3°393			13	-20°085	+11°293	65 2493	9°4					
	301					361					61								
11	-18°647	-3°794	65 2373	9°9	10	+29°951	-24°300			27	-19°913	+29°062	65 2495	8°6					
11	-18°559	-23°652	66 2257	9°5	9	+30°046	-26°628			12	-19°867	+9°760	65 2494	9°6					
10	-18°425	-23°524			12	+30°194	-23°166	66 2292	9°5	24	-19°331	+5°448	65 2496	8°7					
11	-16°720	-35°126	66 2259	9°5	11	+31°692	-19°645	66 2293	9°7	9	-19°204	+57°147	64 2598	9°8					
12	-15°540	-30°081	66 2261	9°4	11	+32°084	-27°923	66 2294	9°7	12	-18°344	+10°557	65 2497	9°6					
9	-15°249	-61°996	66 2260	9°7	11	+32°240	-56°173	66 2295	9°5	13	-55°467	+38°875	65 2454	9°2	25	-17°671	+21°071	65 2498	9°0
11	-13°372	-30°781	66 2262	9°7	9	+32°802	-5°224			12	-55°329	+55°969	64 2550	9°1	9	-17°549	+13°571		
12	-12°702	-47°463	66 2263	9°3	12	+33°274	-17°703	66 2296	9°6	9	-54°889	+56°486	64 2551	9°8	11	-17°519	+63°776	64 2600	9°3
11	-12°668	-2°136	65 2379	9°7	26	+34°341	-58°723	66 2297	8°8	9	-53°611	+1°407			13	-16°897	+24°789	65 2499	9°4
9	-12°488	-45°061	66 2264	9°9	30	+34°445	-4°743	65 2435	8°3	11	-52°723	+11°029	65 2455	9°7	12	-16°243	+6°897	65 2500	9°4
	311					371					11					71			
12	-10°988	-42°901	66 2265	9°4	18	+35°314	-54°739	66 2299	9°0	9	-48°138	+42°884	65 2458	9°8	10	-15°050	+30°260		
9	-9°917	-22°102			9	+35°775	-28°291			11	-47°507	+15°252	65 2457	9°6	14	-13°288	+32°791	65 2504	9°4
9	-9°567	-18°566			11	+36°471	-35°425	66 2301	9°8	9	-46°519	+44°586			10	-13°106	+23°138	65 2505	10°0
9	-8°494	-56°898	66 2268	9°9	11	+36°471	-29°786	66 2300	9°6	24	-45°951	+39°542	65 2459	8°4	9	-12°832	+50°811	65 2507	9°8
9	-8°440	-19°514	66 2269	9°9	10	+36°646	-7°294			9	-45°236	+61°805	64 2561	10°0	10	-12°735	+7°956	65 2506	10°0
11	-7°069	-8°269	66 2270	9°6	16	+37°372	-2°155	65 2438	9°0	9	-44°506	+63°247	64 2562	9°6	10	-11°808	+13°052		
11	-4°718	-4°371	65 2388	9°7	9	+37°395	-4°695			13	-42°953	+34°747	65 2461	9°4	10	-10°298	+52°006	65 2510	9°4
12	-3°062	-50°569	66 2271	9°4	11	+37°435	-9°206	66 2302	9°9	9	-40°899	+22°596			14	-10°108	+24°067	65 2509	9°2
9	-2°946	-24°425			9	+37°780	-42°806	66 2303	9°9	11	-40°705	+12°429	65 2462	9°6	11	-10°060	+6°002	65 2508	9°7
12	+0°189	-2°412	65 2390	9°3	10	+38°438	-4°641			10	-40°182	+12°234	65 2463	9°9	13	-10°021	+63°089	64 2610	9°2
	321					381					21					81			
10	+2°142	-2°928			10	+38°526	-20°115			9	-39°140	+53°736	64 2570	10°0	11	-9°985	+53°100	65 2512	9°4
10	+3°127	-4°232			12	+39°076	-22°241	66 2304	9°7	9	-39°138	+51°293	65 2465	9°9	11	-9°922	+45°940	65 2511	9°4
13	+4°991	-32°163	66 2272	9°3	9	+40°968	-63°713	66 2305	9°8	9	-39°071	+5°986			10	-9°536	+41°896	65 2515	9°8
12	+6°020	-53°812	66 2273	9°4	18	+44°625	-19°340	66 2306	9°0	11	-38°589	+28°114	65 2464	9°5	11	-9°330	+21°633	65 2514	9°8
9	+7°068	-54°647			10	+45°959	-64°202	66 2308	9°8	13	-36°974	+33°211	65 2466	9°2	16	-8°398	+57°996	64 2612	8°9
13	+7°101	-6°934	65 2400	9°4	10	+46°285	-29°859			34	-36°048	+5°456	65 2467	8°6	16	-7°290	+18°493	65 2516	9°2
10	+7°978	-59°281			10	+46°743	-5°702			9	-35°224	+56°856	64 2573	10°0	10	-7°048	+38°317	65 2517	9°8
10	+9°230	-29°067			11	+47°566	-7°299	65 2448	9°9	12	-35°022	+45°467	65 2470	9°2	12	-6°686	+18°261	65 2518	9°4
13	+10°152	-9°099	66 2274	9°2	9	+47°735	-53°413			9	-34°643	+58°559	64 2575	10°0	19	-5°272	+50°097	65 2519	8°8
13	+10°238	-38°667	66 2275	9°3	32	+48°851	-15°974	66 2309	7°0	9	-34°172	+30°963	65 2473	10°0	14	-4°592	+56°623	64 2618	9°0
	331					391					31					91			
13	+10°358	-29°411	66 2276	9°4	10	+49°078	-24°106			9	-34°045	+30°770	65 2471	10°0	10	-4°192	+33°006	65 2520	9°9
10	+11°282	-0°468	65 2404	9°8	9	+50°820	-60°773	66 2310	9°8	9	-33°971	+0°446	65 2469	9°8	9	-3°620	+41°377		
10	+12°072	-22°551			10	+52°017	-12°143			25	-33°753	+16°835	65 2472	8°8	12	-3°462	+29°852	65 2521	9°4
11	+13°149	-14°249	66 2277	9°8	10	+53°394	-0°384			11	-31°923	+12°711	65 2474	9°8	9	-3°162	+23°496		
13	+13°827	-7°214	65 2407	9°2	11	+55°266	-17°149	66 2311	9°9	9	-31°225	+51°566	65 2477	10°0	9	-2°496	+15°217		
11	+14°704	-46°817	66 2278	9°8	9	+55°474	-52°022	66 2312	9°9	20	-31°155	+18°379	65 2475	9°2	9	-1°956	+2°794		
9	+14°807	-24°947			9	+55°852	-60°806	66 2313	9°9	10	-30°955	+6°332			11	-0°582	+20°203	65 2522	9°1
9	+15°146	-10°887			9	+56°818	-58°466			25	-30°443	+16°927	65 2478	8°8	14	-0°504	+20°222		

RECTANGULAR CO-ORDINATES.

13^h 48^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
9	+ 5° 989	+37° 806	65 2533	9° 8	12	+40° 483	+18° 365	65 2581	9° 6	12	-36° 090	-50° 274	66 2330	9° 5	12	- 6° 979	-26° 482	66 2369	9° 5
14	+ 7° 461	+57° 658	64 2638	9° 1	10	+41° 660	+ 3° 904	65 2584	9° 9	30	-35° 549	-29° 799	66 2331	8° 5	9	- 6° 390	-41° 276		
12	+ 7° 911	+57° 727	64 2640	9° 0	11	+41° 976	+51° 156	65 2583	9° 2	11	-35° 472	-10° 593	66 2332	10° 0	9	- 5° 948	-37° 844		
14	+ 9° 570	+37° 260	65 2536	9° 2	10	+42° 070	+22° 190			11	-34° 990	-21° 698	66 2333	9° 8	32	- 5° 386	-24° 772	66 2370	8° 4
9	+10° 585	+47° 997	65 2537	10° 0	9	+42° 123	+59° 139	64 2678	10° 0	14	-34° 894	- 2° 518	65 2468	9° 2	19	- 5° 082	-24° 496	66 2371	8° 8
13	+10° 993	+12° 958	65 2538	9° 2	9	+43° 145	+58° 953	64 2679	9° 6	21	-33° 791	-33° 677	66 2334	9° 1	14	- 2° 876	-47° 085	66 2372	9° 4
11	+11° 105	+ 2° 790	65 2539	10° 0	10	+43° 476	+22° 087	65 2585	9° 8	14	-33° 090	-43° 725	66 2336	9° 4	12	- 2° 869	-21° 534	66 2373	9° 8
10	+12° 707	+10° 804	65 2540	10° 0	9	+43° 620	+ 3° 235			11	-33° 011	-41° 476	66 2337	10° 0	10	- 2° 548	-42° 530		
13	+13° 463	+ 5° 365	65 2542	9° 4	9	+43° 971	+ 5° 463			10	-32° 837	-52° 188	66 2335	10° 0	9	- 2° 361	-55° 758		
9	+13° 571	+51° 478	65 2541	10° 0	18	+46° 146	+11° 877	65 2588	8° 8	27	-31° 201	-20° 008	66 2338	8° 8	9	- 2° 147	- 7° 628		
	121					181					241					301			
9	+13° 643	+ 9° 192			10	+46° 400	+45° 630	65 2587	9° 4	11	-30° 560	-43° 298	66 2339	9° 8	11	- 1° 617	-52° 929	66 2374	10° 0
10	+13° 889	+41° 032	65 2543	9° 1	10	+49° 204	+29° 528	65 2589	9° 5	15	-30° 376	- 2° 171	65 2476	9° 4	10	- 1° 038	- 0° 848		
10	+14° 691	+22° 045	65 2544	10° 0	9	+49° 972	+26° 378			15	-30° 183	-49° 364	66 2340	9° 4	9	- 0° 972	- 3° 599		
11	+15° 274	+37° 257	65 2545	9° 5	9	+52° 450	+64° 247	64 2692	9° 8	10	-29° 483	-28° 571	66 2342	9° 7	10	- 0° 966	-10° 180		
12	+16° 699	+ 8° 183	65 2547	9° 6	11	+52° 492	+ 4° 776	65 2591	9° 4	18	-29° 120	-52° 049	66 2341	9° 4	14	- 0° 750	-25° 898	66 2375	9° 3
9	+16° 850	+59° 183	64 2647	9° 9	9	+52° 949	+ 5° 390	65 2593	9° 9	12	-28° 980	-27° 795	66 2344	9° 5	10	- 0° 318	-38° 804		
9	+17° 076	+46° 634	63 2546	9° 9	9	+53° 439	+25° 210	65 2592	10° 0	10	-28° 674	-49° 478	66 2343	9° 9	11	+ 0° 034	-25° 138	66 2377	9° 8
9	+17° 429	+64° 460	64 2650	9° 8	12	+53° 557	+43° 238	65 2590	9° 2	22	-27° 830	-13° 037	66 2345	8° 8	12	+ 0° 393	-26° 433	66 2378	9° 6
10	+17° 713	+31° 379	65 2548	9° 9	9	+53° 575	+52° 900	64 2693	9° 6	9	-27° 561	-32° 903			10	+ 0° 908	-36° 484		
12	+18° 052	+ 4° 411	65 2552	9° 6	11	+53° 839	+30° 729	65 2594	9° 4	13	-27° 144	- 7° 619	65 2482	9° 4	11	+ 1° 195	- 9° 450		
	131					191					251					311			
11	+18° 192	+45° 954	65 2549	9° 4	9	+54° 913	+64° 671	64 2694	9° 3	11	-26° 773	-36° 320	66 2347	9° 9	9	+ 1° 801	-40° 374		
9	+18° 329	+45° 656	65 2550	9° 8	10	+55° 415	+14° 520	65 2595	9° 5	14	-26° 459	-19° 992	66 2348	9° 2	13	+ 2° 018	-19° 633	66 2379	9° 4
10	+18° 347	+16° 249			9	+55° 652	+57° 584	64 2696	9° 3	16	-26° 250	- 2° 479	65 2485	9° 1	15	+ 2° 218	-12° 206	66 2380	9° 2
32	+18° 545	+51° 382	65 2551	8° 1	40	+56° 825	+63° 695	64 2697	8° 0	11	-25° 206	-39° 648	66 2349	10° 0	9	+ 2° 236	-14° 604	65 2525	9° 7
9	+18° 729	+ 4° 988			9	+58° 900	+56° 233	64 2700	9° 6	10	-24° 989	-28° 212			9	+ 2° 648	- 5° 616		
36	+19° 510	+41° 706	65 2553	8° 0	9	+59° 971	+ 7° 910	65 2596	10° 0	10	-24° 466	-29° 289			10	+ 3° 020	-32° 589		
9	+20° 347	+22° 127			9	+60° 313	+ 9° 533	65 2597	10° 0	13	-22° 788	- 1° 129	65 2489	9° 4	14	+ 3° 036	-41° 311	66 2381	9° 2
24	+20° 496	+10° 494	65 2554	8° 7	9	+61° 425	+63° 111	64 2702	10° 0	12	-21° 576	-47° 810	66 2350	9° 7	10	+ 3° 126	-40° 490	66 2382	10° 0
12	+20° 932	+12° 144	65 2555	9° 6	14	+61° 945	+52° 720	64 2703	8° 8	12	-20° 854	-23° 756	66 2352	9° 4	11	+ 3° 218	-33° 379		
13	+22° 119	+24° 055	65 2556	9° 4	9	+62° 896	+ 3° 107			9	-20° 722	- 5° 915			9	+ 6° 027	-36° 133		
	141					201					261					321			
10	+23° 219	+ 4° 727	65 2560	10° 0	11	+63° 116	+12° 909	65 2598	9° 4	9	-20° 546	-42° 581			20	+ 6° 367	- 1° 164	65 2534	9° 0
10	+23° 336	+15° 862	65 2559	10° 0	10	-63° 024	- 7° 848	65 2448	9° 9	10	-20° 493	- 4° 179			9	+ 6° 412	-49° 560	66 2383	10° 0
10	+23° 363	+36° 077	65 2557	9° 8	50	-61° 148	-16° 428	66 2309	7° 6	9	-20° 450	-63° 578	66 2351	10° 0	10	+ 6° 629	-42° 716		
9	+23° 646	+40° 139	65 2558	9° 8	9	-60° 609	-64° 722	66 2308	9° 8	13	-19° 925	- 9° 620	66 2353	9° 4	10	+ 6° 748	-22° 618		
9	+23° 912	+37° 446	65 2561	9° 8	9	-60° 323	-24° 500			10	-19° 505	-23° 496	66 2354	9° 9	10	+ 6° 917	- 6° 774		
24	+24° 193	+43° 350	65 2562	8° 6	9	-58° 242	-12° 355			9	-18° 653	-50° 864			14	+ 7° 314	-31° 698	66 2384	9° 4
10	+25° 407	+49° 652	65 2563	9° 5	9	-57° 711	- 0° 521			12	-18° 531	-14° 279	66 2355	9° 8	14	+ 8° 072	-36° 388	66 2385	9° 2
9	+26° 010	+29° 770			10	-55° 994	-60° 945	66 2310	9° 8	9	-17° 785	-25° 303			13	+ 8° 143	- 2° 873	65 2535	9° 5
12	+26° 066	+13° 735	65 2565	9° 4	11	-54° 652	-17° 126	66 2311	9° 9	13	-16° 771	-37° 400	66 2356	9° 4	9	+ 8° 313	-48° 333	66 2386	10° 0
9	+26° 199	+20° 012			19	-52° 006	-16° 096	66 2314	8° 8	10	-16° 639	-55° 703			9	+10° 611	- 7° 846		
	151					211					271					331			
11	+26° 347	+36° 153	65 2564	9° 4	9	-51° 959	-51° 891	66 2312	9° 9	11	-16° 521	-42° 557	66 2357	9° 8	14	+11° 449	-19° 777	66 2387	9° 2
9	+26° 598	+44° 143	65 2566	10° 0	9	-50° 990	-60° 663	66 2313	9° 9	11	-15° 939	-50° 194	66 2358	9° 9	10	+11° 518	-29° 589		
12	+27° 513	+ 4° 657	65 2568	9° 4	9	-50° 855	- 6° 356			9	-15° 346	- 0° 844	65 2501	10° 0	13	+11° 711			

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
	351,					411,					PLATE CENTRE.					51,				
10	+25°293	-41°374			10	+63°259	-3°883	65°2599	9°9		14h 8m, - 66°.				11	-45°053	+0°784	65°2602	9°4	
10	+25°607	-40°566									Plate 1277. 1895, May 22.				9	-44°864	+19°849			
10	+25°976	-22°173									PROVISIONAL CONSTANTS.				15	-44°730	+25°186	65°2603	9°3	
11	+26°358	-7°136									a = -°01127	d = +°00089		9	-44°705	+24°408				
9	+26°414	-64°650	66°2399	9°9							b = -°00076	e = -°01118		10	-44°529	+33°459				
											c = -°1181	f = -°0636								
26	+26°647	-48°460	66°2398	8°9							To obtain standard co-ordinates, ξ, η				20	-44°435	+58°442	64°2723	9°2	
44	+27°163	-62°161	66°2400	8°0							ξ = x + ax + by + c			10	-43°277	+39°358				
13	+28°293	-37°958	66°2401	9°6							η = y + dx + ey + f			15	-42°800	+48°705	65°2604	9°2		
11	+29°234	-64°688	66°2402	9°4										10	-42°763	+33°845				
12	+29°896	-54°441	66°2403	9°6										9	-42°006	+15°239				
	361														61					
10	+32°437	-23°844								13	-64°051	+29°110	65°2589	9°5	22	-41°785	+62°230	64°2729	9°0	
11	+32°513	-3°354			10	-63°450	+7°877			10	-63°450	+7°877			10	-41°588	+60°786	64°2730	9°8	
9	+32°914	-24°855			11	-63°310	+63°932	64°2692	9°8	11	-63°310	+63°932			13	-41°305	+59°367	64°2731	9°4	
10	+33°917	-45°511	66°2404	9°9	9	-63°072	+26°037			9	-63°072	+26°037			10	-40°789	+38°265			
9	+35°127	-46°656			10	-62°928	+19°075			10	-62°928	+19°075			9	-40°783	+58°127			
32	+35°417	-20°437	66°2405	8°4	9	-62°620	+12°680			9	-62°620	+12°680			10	-40°539	+35°439			
16	+37°221	-5°016	65°2578	9°1	11	-61°401	+52°073	64°2693	9°6	11	-61°401	+52°073			9	-40°395	+55°282			
9	+38°142	-26°402			9	-61°251	+49°704			9	-61°251	+49°704			11	-40°143	+56°381	64°2732	9°8	
11	+38°412	-26°443			9	-61°147	+28°464			9	-61°147	+28°464			10	-39°451	+29°546			
24	+38°729	-42°741	66°2406	8°8	14	-60°912	+64°514	64°2694	9°3	14	-60°912	+64°514			9	-39°411	+23°301			
	371										11					71				
34	+39°304	-64°387	66°2408	8°6	16	-60°717	+43°082	65°2590	9°2	16	-60°717	+43°082			9	-39°247	+59°586			
16	+39°513	-32°998	66°2407	8°7	12	-59°684	+57°499	64°2696	9°3	12	-59°684	+57°499			9	-39°187	+9°455			
20	+39°529	-33°100			15	-59°556	+30°650	65°2594	9°4	15	-59°556	+30°650			16	-38°703	+28°515	65°2606	9°2	
11	+39°589	-51°053	66°2409	9°7	10	-59°517	+25°120	65°2592	10°0	10	-59°517	+25°120			10	-38°681	+19°349	65°2605	10°0	
15	+40°027	-7°857	65°2582	9°2	14	-58°979	+4°695	65°2591	9°4	14	-58°979	+4°695			13	-38°275	+43°023	65°2608	9°9	
13	+40°393	-50°379	66°2412	9°4	30	-58°921	+63°722	64°2697	8°0	30	-58°921	+63°722			10	-38°098	+44°582			
9	+40°421	-9°732			10	-58°707	+11°798			10	-58°707	+11°798			13	-38°025	+11°324	65°2607	9°4	
9	+40°554	-19°771			11	-58°583	+5°337	65°2593	9°9	11	-58°583	+5°337			9	-37°860	+33°133			
12	+40°810	-19°545	66°2410	9°6	9	-58°082	+41°153			9	-58°082	+41°153			9	-37°451	+9°336			
17	+40°830	-51°193	66°2413	9°0	9	-57°978	+24°571			9	-57°978	+24°571			34	-37°262	+19°432	65°2610	8°3	
	381					21					21					81				
32	+41°116	-19°145	66°2411	8°5	9	-57°737	+36°484			9	-57°737	+36°484			9	-37°107	+20°721			
9	+42°458	-0°618			10	-57°686	+5°556			10	-57°686	+5°556			10	-36°953	+1°456	65°2609	10°0	
9	+43°059	-59°997	66°2414	9°8	9	-57°169	+17°181			9	-57°169	+17°181			18	-36°507	+18°797	65°2611	9°1	
9	+43°366	-11°055			9	-56°963	+6°829			9	-56°963	+6°829			10	-36°209	+53°086			
12	+44°267	-7°870	65°2586	9°9	13	-56°777	+14°606	65°2595	9°5	13	-56°777	+14°606			9	-36°182	+25°203			
13	+45°947	-48°085	66°2416	9°4	11	-56°375	+56°372	64°2700	9°6	11	-56°375	+56°372			9	-35°949	+28°620			
9	+46°393	-23°935			9	-55°275	+39°493			9	-55°275	+39°493			13	-34°541	+11°930	65°2612	9°4	
12	+46°586	-9°877	66°2415	9°4	9	-55°151	+23°517			9	-55°151	+23°517			11	-34°252	+10°499	65°2613	9°7	
11	+46°595	-62°999	66°2418	9°4	9	-53°598	+63°236	64°2702	10°0	9	-53°598	+63°236			9	-31°862	+14°120			
9	+46°763	-3°955			10	-53°120	+28°334			10	-53°120	+28°334			12	-31°740	+38°415	65°2614	9°8	
	391					31					31					91				
11	+46°836	-31°261	66°2417	9°5	22	-53°042	+53°111	64°2703	8°8	22	-53°042	+53°111			13	-31°321	+58°058	64°2738	9°4	
9	+48°515	-63°085	66°2420	10°0	11	-51°775	+8°356	65°2596	10°0	11	-51°775	+8°356			9	-30°655	+54°701			
38	+48°769	-16°138	66°2419	8°1	10	-51°670	+15°417			10	-51°670	+15°417			13	-30°583	+56°797	64°2740	9°2	
11	+50°600	-27°712	66°2421	9°6	11	-51°529	+9°985	65°2597	10°0	11	-51°529	+9°985			9	-30°272	+60°741			
9	+51°107	-19°152			9	-51°013	+44°663			9	-51°013	+44°663			11	-30°184	+30°167	65°2615	9°7	
10	+51°193	-49°340	66°2422	10°0	9	-51°001	+18°081			9	-51°001	+18°081			12	-29°891	+30°478	65°2616	9°4	
15	+52°592	-60°966	66°2423	9°2	9	-49°780	+30°019			9	-49°780	+30°019			10	-29°546	+44°623			
9	+53°753	-59°871	66°2424	9°7	9	-49°703	+35°297			9	-49°703	+35°297			9	-29°323	+16°159			
9	+54°070	-28°205			9	-49°416	+52°728			9	-49°416	+52°728			15	-28°366	+38°495	65°2617	9°2	
11	+55°013	-29°363	66°2425	10°0	24	-49°188	+60°420	64°2709	9°0	24	-49°188	+60°420			26	-28°058	+51°599	65°2618	8°6	
	401					41					41					101				
11	+56°359	-58°804	66°2428	9°4	9	-49°157	+54°263			9	-49°157	+54°263			9	-26°976	+39°041			
10	+57°207	-9°410	66°2427	9°9	13	-49°004	+13°575	65°2598	9°4	13	-49°004	+13°575			18	-26°935	+39°655	65°2619	8°8	
9	+58°682	-58°172	66°2429	9°6	9	-48°624	+48°106			9	-48°624	+48°106			9	-25°818	+5°905			
9	+59°101	-60°756	66°2430	9°8	9	-48°559	+6°641			9	-48°559	+6°641			9	-24°814	+56°471			
11	+60°696	-51°337	66°2432	9°4	10	-48°490	+3°777			10	-48°490	+3°777			9	-24°633	+43°246			
11	+61°404	-62°502	66°2436	9°3	15	-47°180	+45°276	65°2600	9°0	15	-47°180	+45°276			12	-24°518	+54°855	64°2746	9°6	
13	+61°805	-49°710	66°2435	9°4	9	-47°106	+49°430			9	-47°106	+49°430			9	-23°792	+4°433			
9	+62°146	-18°693	66°2433	9°9	9	-46°978	+61°133	64°2715	10°0	9	-46°978	+61°133			11	-22°771	+43°996	65°2621	10°0	
9	+62°934	-50°986	66°2437	9°4	12	-46°467	+37°027	65°2601	10°0	12	-46°467	+37°027			12	-22°230	+58°423	64°2752	10°0	
9	+62°992	-60°660	66°2438	9°8	9	-46°204	+49°264			9	-46°204	+49°264			9	-22°182	+33°130			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
10	-21° 9'22	+20° 6'69	65 2622	10° 0	9	-4° 9'79	+47° 0'80			9	+20° 0'19	+24° 3'15			11	+42° 9'01	+13° 5'50		
10	-21° 0'73	+11° 1'61			11	-4° 8'69	+59° 2'65			12	+20° 0'25	+62° 7'95	64 2794	10° 0	11	+42° 9'45	+12° 2'61	65 2684	9° 2
14	-21° 0'46	+56° 1'06	64 2754	9° 2	9	-3° 9'42	+62° 1'35			9	+20° 4'40	+39° 2'18			9	+43° 3'63	+49° 9'44		
10	-21° 0'32	+4° 4'494			9	-3° 7'89	+23° 8'95			11	+20° 4'53	+10° 4'30	65 2666	9° 9	11	+43° 8'96	+16° 6'77		
11	-20° 9'54	+11° 3'71	65 2623	9° 4	11	-3° 5'63	+49° 5'49	65 2645	10° 0	9	+20° 6'01	+7° 0'38			10	+44° 2'21	+6° 5'17		
9	-20° 6'66	+31° 6'96			9	-3° 2'68	+17° 3'35			38	+20° 7'01	+9° 3'57	65 2667	7° 9	9	+45° 0'58	+3° 4'43		
9	-20° 3'72	+35° 4'26			9	-3° 2'20	+44° 9'86			20	+20° 7'15	+47° 9'44	65 2665	9° 1	10	+45° 1'26	+57° 4'54		
9	-19° 8'01	+11° 2'27			11	-2° 4'38	+17° 4'37	65 2646	9° 4	11	+21° 0'99	+57° 0'63			9	+45° 3'25	+53° 8'12		
9	-19° 4'54	+20° 2'03	65 2624	10° 0	9	-2° 3'84	+23° 2'11			9	+21° 6'19	+51° 2'68			13	+45° 4'48	+35° 6'96	65 2685	9° 8
9	-18° 5'46	+43° 4'75			9	-2° 3'40	+33° 4'57			9	+22° 9'31	+22° 7'04			9	+45° 5'23	+26° 2'46		
9	-18° 4'82	+49° 4'48			9	-0° 8'52	+23° 7'53			9	+23° 8'58	+17° 4'67			9	+45° 7'88	+20° 4'51		
9	-18° 2'45	+60° 9'97			14	+0° 0'10	+13° 8'94	65 2648	9° 3	11	+24° 3'17	+49° 1'00			9	+45° 8'14	+31° 1'09		
12	-17° 6'60	+19° 9'12	65 2625	9° 8	9	+0° 4'00	+1° 1'72			12	+24° 5'93	+54° 4'20	64 2799	9° 9	15	+46° 1'42	+57° 5'88	64 2816	9° 6
9	-17° 6'55	+27° 8'59			9	+1° 1'26	+28° 1'11			9	+24° 9'00	+61° 7'36			9	+46° 1'62	+46° 9'04		
9	-17° 5'31	+22° 0'64			10	+1° 6'96	+57° 4'49			9	+25° 0'68	+64° 6'15			24	+46° 1'97	+37° 8'50	65 2686	8° 3
9	-17° 3'58	+51° 6'90			13	+2° 3'17	+15° 3'89	65 2649	9° 3	11	+25° 9'13	+42° 5'38	65 2669	9° 9	9	+46° 2'35	+17° 5'98		
9	-17° 0'66	+32° 0'40			9	+3° 9'07	+16° 2'76			9	+25° 9'94	+35° 5'24			9	+46° 6'66	+11° 5'55		
9	-16° 8'89	+5° 3'24			13	+4° 1'76	+51° 9'75	65 2650	9° 5	10	+26° 0'92	+53° 7'62			12	+47° 2'42	+30° 1'36	65 2687	9° 9
9	-16° 8'38	+41° 1'82			9	+4° 1'83	+12° 5'08			12	+26° 4'03	+18° 6'19	65 2671	9° 6	9	+47° 6'20	+48° 4'48		
11	-16° 8'27	+35° 5'94	65 2626	9° 8	9	+4° 5'61	+1° 4'68			14	+26° 4'20	+52° 7'14	65 2670	9° 2	9	+47° 8'75	+15° 0'67		
10	-16° 3'15	+0° 6'88			52	+4° 9'71	+19° 1'42	65 2652	7° 0	9	+26° 4'92	+61° 2'01			10	+48° 4'02	+12° 1'66		
10	-16° 2'97	+59° 1'32			11	+5° 5'01	+49° 8'08	65 2653	10° 0	10	+27° 7'16	+33° 8'30			11	+49° 2'02	+4° 2'95	65 2688	9° 9
10	-15° 5'23	+36° 0'77			9	+5° 5'49	+54° 2'56			9	+28° 1'26	+41° 3'80			14	+49° 6'12	+20° 9'95	65 2689	9° 6
26	-15° 2'33	+8° 9'67	65 2627	8° 1	11	+5° 5'91	+49° 2'60	65 2654	10° 0	9	+28° 5'56	+55° 7'44			15	+50° 2'80	+19° 7'64	65 2690	9° 4
11	-14° 8'74	+19° 4'36	65 2628	9° 9	9	+5° 7'15	+49° 2'92			12	+29° 0'75	+35° 5'39			9	+50° 5'10	+25° 4'01		
10	-14° 7'62	+9° 9'81			9	+5° 8'44	+32° 5'64			22	+29° 3'96	+50° 7'34	65 2672	8° 6	9	+50° 7'52	+27° 0'51		
11	-14° 6'13	+47° 1'50			40	+5° 8'97	+46° 6'26	65 2655	7° 1	9	+29° 4'17	+44° 6'61			9	+51° 0'95	+33° 8'28		
15	-14° 3'06	+2° 9'00	65 2629	9° 1	10	+6° 3'55	+10° 2'29	65 2656	9° 6	9	+29° 4'73	+21° 6'81			14	+51° 1'54	+42° 9'24	65 2691	9° 4
12	-14° 2'02	+61° 0'71	64 2759	9° 9	9	+6° 5'37	+23° 5'17			11	+29° 5'19	+21° 8'87	65 2673	9° 8	11	+51° 3'48	+54° 8'06	64 2821	9° 9
9	-14° 0'25	+42° 5'11			9	+6° 6'00	+49° 1'20			9	+29° 6'23	+46° 1'54			9	+51° 3'70	+14° 2'33		
9	-13° 6'79	+18° 8'66			13	+6° 8'27	+18° 1'42	65 2657	9° 2	14	+29° 6'52	+13° 7'44	65 2674	9° 5	9	+52° 0'52	+33° 9'82		
10	-13° 5'60	+8° 2'86			9	+7° 1'36	+52° 9'22			12	+29° 8'96	+46° 3'85			11	+52° 0'87	+35° 4'02	65 2692	9° 9
14	-13° 2'22	+63° 9'14	64 2760	9° 4	12	+8° 5'75	+2° 4'50	65 2658	9° 4	9	+30° 4'03	+16° 8'31			9	+52° 3'13	+25° 9'02		
9	-13° 2'14	+19° 2'62			9	+9° 0'43	+41° 7'10			10	+30° 7'62	+5° 9'91			11	+52° 6'84	+36° 0'36	65 2693	10° 0
9	-13° 1'04	+20° 5'77			13	+9° 7'54	+61° 4'88	64 2783	9° 5	13	+30° 9'13	+49° 6'87	65 2675	9° 9	24	+52° 7'87	+7° 1'90	65 2696	8° 4
9	-12° 8'51	+34° 8'65			9	+9° 7'83	+53° 9'91			11	+31° 0'95	+47° 3'56			12	+52° 9'76	+42° 0'77	65 2694	9° 9
11	-12° 6'38	+51° 5'53	65 2631	9° 9	12	+9° 9'10	+56° 6'71	64 2784	9° 7	11	+31° 6'08	+7° 4'02	65 2676	9° 8	23	+53° 5'66	+51° 9'94	65 2695	8° 7
9	-12° 5'49	+1° 2'20			12	+10° 6'24	+28° 5'41	65 2659	9° 6	13	+31° 7'81	+8° 0'94	65 2677	9° 8	9	+53° 8'78	+22° 5'62		
11	-12° 3'11	+54° 8'55	64 2762	9° 9	11	+10° 8'95	+41° 0'26			12	+32° 8'66	+31° 2'12	65 2678	9° 9	11	+54° 2'02	+20° 3'57	65 2698	10° 0
12	-11° 4'05	+40° 3'02	65 2632	9° 4	9	+11° 1'97	+24° 5'02			14	+32° 8'90	+61° 4'17	64 2804	10° 0	9	+54° 4'55	+1° 8'27		
10	-11° 3'26	+45° 0'22			10	+11° 5'76	+34° 5'27			9	+34° 2'11	+43° 7'23			9	+54° 6'69	+32° 6'13		
11	-11° 3'11	+42° 0'64	65 2633	9° 9	9	+11° 7'12	+10° 9'37			10	+35° 4'86	+59° 7'58			9	+54° 7'94	+62° 2'53		
9	-11° 0'71	+58° 2'00			9	+13° 1'04	+26° 4'59			10	+36° 8'06	+47° 3'96			9	+55° 1'94	+27° 8'51		
12	-10° 5'57	+50° 4'00	65 2634	9° 8	9	+13° 1'65	+17° 7'60			9	+36° 8'29	+13° 5'56			9	+55° 2'15	+17° 2'57		
10	-10° 2'74	+15° 2'70			11	+13° 6'20	+36° 5'23			9	+36° 8'80	+63° 7'83			9	+55° 2'18	+41° 8'03		
18	-9° 8'72	+32° 9'89	65 2636	9° 2	10	+14° 1'42	+49° 1'76			11	+37° 0'26	+45° 7'81			11	+55° 5'33	+7° 1'48	65 2700	10° 0
11	-9° 8'66	+5° 7'92	65 2635	9° 8	11	+14° 5'13	+44° 9'83	65 2660	10° 0	9	+37° 2'16	+20° 5'71			9	+55° 8'46	+64° 1'98		
9	-9° 8'57	+4° 5'66			9	+14° 7'17	+20° 0'41			9	+38° 0'49	+30° 8'00			13	+56° 2'98	+32° 2'81	65 2699	9° 6
28	-9° 2'90	+31° 6'57	65 2637	8° 2	1														

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
9	+60°876	+34°449			9	-48°512	-33°144			9	-31°726	-0°912			13	-8°622	-22°439	66 2472	9°9
17	+61°757	+24°445	65 2702	9°2	12	-48°288	-57°561	66 2429	9°6	11	-31°662	-11°146	66 2455	10°0	10	-7°992	-20°481		
9	+62°605	+0°957			10	-47°685	-51°411			9	-31°403	-39°095			9	-7°983	-36°883		
11	+63°283	+9°461			11	-47°665	-18°033	66 2433	9°9	12	-31°393	-51°593	66 2454	9°9	10	-7°607	-57°524		
12	+63°573	+6°217	65 2705	9°6	11	-47°661	-60°143	66 2430	9°8	9	-29°828	-64°932			10	-7°170	-37°283		
11	+64°110	+31°857			12	-47°652	-3°154	65 2599	9°9	9	-29°381	-53°351			14	-6°884	-46°361	66 2473	9°8
12	+64°476	+24°073	65 2707	10°0	9	-47°607	-33°965			10	-28°992	-40°980			14	-6°648	-34°195	66 2474	9°7
11	+64°673	+48°249	65 2704	9°9	12	-47°359	-53°892	66 2431	10°0	10	-27°558	-6°090			9	-6°190	-33°593		
9	+64°864	+36°919	65 2706	10°0	15	-46°761	-50°655	66 2432	9°4	15	-27°520	-14°685	66 2456	9°4	9	-6°056	-33°597		
9	-64°165	-62°615			15	-45°791	-48°927	66 2435	9°4	9	-27°508	-43°127			9	-5°990	-29°360		
	361					421					481					541			
9	-64°063	-4°437			9	-45°523	-62°721	66 2434	10°0	9	-27°164	-64°728			9	-5°922	-30°499		
14	-63°802	-10°320	66 2415	9°4	15	-45°256	-61°729	66 2436	9°3	11	-26°724	-48°261	66 2457	10°0	9	-5°604	-13°145		
10	-63°711	-60°509	66 2414	9°8	14	-45°031	-8°006	66 2439	9°4	19	-26°579	-88°485	66 2458	8°8	9	-5°493	-14°441		
9	-63°003	-24°363			10	-44°734	-18°389			12	-25°949	-6°065	65 2620	9°4	9	-5°322	-23°843		
9	-62°683	-49°762			14	-44°573	-50°109	66 2437	9°4	9	-25°671	-22°391			10	-4°479	-50°693		
13	-61°996	-31°632	66 2417	9°5	10	-44°111	-39°230			9	-25°100	-50°766			9	-4°111	-14°790		
13	-61°692	-48°478	66 2416	9°4	11	-43°832	-59°766	66 2438	9°8	10	-24°727	-46°262			11	-3°976	-21°459		
9	-61°674	-8°795			9	-43°830	-32°897			15	-24°705	-57°500	66 2459	9°4	15	-3°932	-41°344	66 2475	9°6
34	-61°173	-16°422	66 2419	8°1	9	-43°744	-6°966			9	-24°221	-3°607			13	-3°925	-1°431	65 2644	9°5
9	-60°885	-43°498			9	-43°649	-8°240			10	-23°398	-43°586			16	-3°770	-12°856	66 2476	8°9
	371					431					491					551			
9	-60°433	-43°335			11	-43°436	-30°921			9	-22°623	-39°865			9	-3°595	-12°192		
11	-59°960	-63°295	66 2418	9°4	9	-42°130	-18°693			10	-22°574	-5°028			19	-3°318	-47°106	66 2477	9°1
10	-59°265	-15°792			9	-41°061	-20°649			14	-22°494	-15°958	66 2460	9°9	9	-2°954	-55°063		
10	-58°630	-19°250			9	-40°861	-7°980			9	-22°100	-11°014			11	-2°262	-5°348	65 2647	9°8
9	-58°599	-25°824			12	-40°776	-61°437	66 2441	9°4	9	-20°570	-57°569			20	-2°113	-29°137	66 2478	9°0
13	-58°513	-27°812	66 2421	9°6	9	-40°612	-32°670			9	-19°982	-20°825			9	-1°241	-0°670		
9	-58°359	-41°965			10	-40°596	-59°098	66 2442	9°8	20	-19°866	-7°840	66 2463	8°2	10	-0°549	-47°510		
9	-58°043	-63°239	66 2420	10°0	9	-40°248	-34°615			10	-19°830	-7°698			9	-0°544	-21°925		
10	-56°384	-49°332	66 2422	10°0	9	-40°182	-21°443			12	-19°639	-32°872	66 2461	10°0	9	-0°240	-19°059		
9	-55°873	-29°720			10	-39°796	-64°451	66 2443	9°6	12	-19°569	-35°607	66 2462	10°0	14	+0°294	-61°877	66 2479	9°6
	381					441					501					561			
9	-55°868	-6°357			12	-39°792	-45°931	66 2445	10°0	12	-19°410	-12°503	66 2464	9°4	14	+1°976	-56°389	66 2480	9°6
9	-55°035	-28°050			13	-39°725	-58°232	66 2444	9°5	9	-19°200	-49°282			9	+2°332	-18°931		
9	-54°962	-28°258			10	-38°766	-49°084			9	-18°036	-24°181			9	+2°364	-57°657		
9	-54°854	-61°499			10	-38°685	-23°977			9	-17°572	-51°138			9	+2°403	-28°509		
9	-54°161	-7°727			9	-38°562	-20°571			9	-17°448	-16°709			9	+2°477	-9°815		
15	-54°140	-60°834	66 2423	9°2	10	-38°531	-12°844	66 2448	10°0	9	-15°511	-28°363			11	+2°930	-37°802		
12	-54°018	-29°148	66 2425	10°0	11	-38°033	-27°810			9	-15°399	-43°434			15	+4°020	-49°232	66 2481	9°6
9	-53°416	-5°931			11	-38°004	-53°410	66 2447	9°8	9	-15°328	-8°294			10	+4°396	-1°980		
10	-53°343	-6°699			9	-37°570	-4°156			9	-15°166	-39°221			9	+4°500	-17°593		
11	-53°301	-8°895	66 2427	9°9	14	-37°090	-39°346	66 2450	9°9	9	-14°678	-46°878			11	+4°834	-6°143	65 2651	10°0
	391					451					511					571			
9	-53°287	-5°909			10	-36°978	-45°203			14	-14°607	-10°447	66 2466	9°7	10	+5°539	-40°888		
11	-53°096	-59°616	66 2424	9°7	9	-36°822	-8°252			11	-14°121	-4°626	65 2630	9°8	14	+5°546	-57°493	66 2482	9°9
9	-52°849	-21°865			14	-36°727	-57°250	66 2449	9°4	9	-14°039	-16°433			9	+5°778	-14°876		
9	-52°727	-48°668			9	-36°329	-26°348			11	-14°005	-64°252	66 2465	9°9	9	+6°020	-43°036		
9	-51°892	-60°487			11	-36°271	-14°168			16	-13°885	-39°545	66 2467	9°3	9	+6°119	-29°200		
11	-51°786	-51°354			9	-35°852	-32°997			9	-13°673	-42°454			9	+6°940	-1°105		
9	-51°574	-17°474			9	-35°332	-17°933			11	-13°654	-18°646			9	+8°016	-18°248		
9	-51°174	-51°782			10	-35°200	-23°184			15	-13°467	-50°722	66 2469	9°6	10	+8°181	-0°527		
9	-50°968	-25°174			9	-34°848	-1°459			12	-13°363	-24°576	66 2470	9°8	10	+8°192	-29°919		
9	-50°959	-9°229			9	-34°509	-60°739			9	-12°867	-33°009			9	+8°494	-54°169		
	401					461					521					581			
12	-50°561	-58°387	66 2428	9°4	16	-34°338	-35°637	66 2451	9°2	9	-12°523	-35°775			9	+8°547	-34°604		
9	-50°392	-10°398			10	-33°928	-21°737			9	-12°293	-19°803			9	+8°648	-38°363		
9	-50°263	-19°557			9	-33°824	-62°839			10	-12°025	-54°180			10	+8°735	-60°099		
9	-50°146	-51°494			11	-33°781	-43°087			9	-11°885	-10°358			9	+8°899	-14°334		
9	-49°632	-40°581			9	-33°727	-49°969			16	-10°353	-50°739	66 2471	9°6	10	+9°151	-55°407		
9	-49°498	-11°020			9	-33°372	-6°482			9	-9°778	-64°374			11	+10°092	-33°424		
9	-49°494	-11°742			10	-33°316	-3°478			9	-9°603	-62°454			9	+10°752	-60°803		
10	-49°065	-31°361			11	-33°032	-56°941	66 2452	10°0	9	-9°585	-26°666			10	+12°395	-34°290		
9	-48°905	-50°401			9	-32°347	-59°189			11	-9°009	-56°976			15	+13°135	-29°643	66 2484	9°4
9	-48°744	-21°639			14	-31°883	-47°289	66 2453	9°9	9	-8°961	-54°396			11	+13°351	-61°208	66 2485	10°0

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
<div>PLATE CENTRE. 14^h 24^m, - 66°. Plate 1544. 1896, June II. PROVISIONAL CONSTANTS. a = - '01140 d = - '00004 b = - '00007 e = - '01121 c = - '0143 f = - '0074 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$</div>																			
9	591, +13.440	-31.389			10	651, +33.607	-11.050			9	711, +58.861	-1.997			10	-64.400	+14.448		
17	+13.905	-26.420	66 2486	9.0	9	+34.011	-26.460			11	+59.018	-5.090			9	-64.274	+53.770		
14	+15.090	-42.563	66 2487	9.9	42	+34.357	-20.937	66 2505	8.0	9	+59.215	-8.498			11	-63.849	+54.436	64 2821	9.9
9	+15.398	-40.928			9	+36.079	-39.007			10	+59.811	-57.409			11	-63.698	+11.596		
10	+15.428	-40.101			14	+36.238	-29.840	66 2506	9.9	15	+59.827	-21.984	66 2522	9.6	9	-63.682	+6.415		
14	+15.432	-44.295	66 2488	9.8	9	+36.862	-44.774			13	+59.882	-15.160	66 2521	9.8	15	-63.173	+42.465	65 2691	9.4
9	+15.736	-29.176			11	+36.995	-50.254			12	+60.887	-62.159	66 2526	9.8	16	-63.107	+20.491	65 2689	9.6
14	+16.494	-32.600	66 2489	9.8	15	+37.053	-19.079	66 2507	9.2	15	+60.928	-36.491	66 2523	9.5	9	-62.601	+37.728		
9	+16.922	-33.496			9	+37.144	-38.407			13	+61.459	-51.665	66 2527	9.9	10	-62.560	+33.398		
64	+16.940	-7.436	66 2490	5.7	10	+39.103	-53.020			12	+61.732	-22.020	66 2524	10.0	10	-62.542	+24.964		
20	601 +16.980	-42.698	66 2491	8.8	10	661 +39.186	-13.842			13	721 +62.126	-6.424	65 2703	9.7	9	-62.418	+26.611		
10	+17.488	-40.609			14	+39.294	-45.900	66 2508	10.0	16	+62.150	-26.920	66 2525	9.6	17	-62.355	+19.315	65 2690	9.4
10	+17.712	-26.054			12	+39.414	-44.352	66 2510	10.0	10	+62.653	-15.055			14	-62.313	+3.806	65 2688	9.9
11	+17.792	-42.345			25	+39.480	-41.564	66 2509	8.9	9	+62.674	-9.303			12	-61.687	+35.037	65 2692	9.9
10	+18.055	-52.699			9	+40.046	-64.540			10	+64.464	-18.013			9	-61.622	+33.621		
11	+18.366	-42.437			9	+40.459	-2.717			10	+64.539	-13.766			10	-61.528	+37.405		
11	+18.617	-40.787			12	+40.960	-4.840	65 2682	10.0					19	-61.417	+51.696	65 2695	8.7	
21	+19.127	-41.047	66 2493	8.8	9	+41.778	-44.706							14	-61.287	+41.762	65 2694	9.9	
15	+19.280	-0.568	65 2663	9.2	9	+41.792	-2.151							12	-61.147	+35.708	65 2693	10.0	
12	+19.359	-12.506	66 2492	9.8	9	+41.885	-13.136							10	-60.936	+61.996			
14	611 +19.605	-35.348	66 2494	9.8	14	671 +41.916	-27.753							9	-60.870	+13.878			
9	+19.701	-54.633			9	+42.178	-0.778							9	-60.826	+44.124			
9	+19.985	-7.798			9	+45.295	-9.795							9	-60.783	+25.573			
10	+20.542	-45.538			9	+45.681	-1.180							9	-60.682	+5.707			
9	+20.725	-36.777			9	+46.152	-42.503							9	-60.378	+40.662			
10	+20.868	-13.080	66 2496	10.0	14	+46.553	-27.321							10	-60.017	+64.022			
9	+20.974	-27.152			12	+46.603	-13.289							9	-59.933	+43.150			
9	+21.025	-61.266			10	+47.027	-13.632							9	-59.822	+44.604			
14	+21.031	-12.091	66 2497	9.4	24	+47.210	-16.605	66 2511	8.7					9	-59.536	+25.836			
9	+21.214	-60.832			10	+47.812	-18.638							10	-59.362	+49.195			
14	621 +21.533	-41.000	66 2498	9.6	9	681 +47.863	-4.973							9	-59.279	+56.709			
10	+22.105	-30.223			14	+48.036	-46.871	66 2512	10.0					9	-59.130	+47.774			
10	+22.523	-55.544			9	+48.461	-29.061							9	-59.062	+34.523			
13	+22.582	-28.429	66 2499	9.6	11	+48.883	-0.757							11	-59.036	+41.644			
16	+23.172	-1.189	65 2668	8.8	17	+49.263	-41.288	66 2513	9.1					10	-58.976	+22.359			
9	+23.198	-33.669			9	+49.424	-31.560							23	-58.964	+6.962	65 2696	8.4	
9	+23.525	-15.564			9	+49.924	-40.618							10	-58.902	+32.448			
10	+23.961	-35.771			10	+50.295	-58.648							9	-58.731	+10.846			
9	+24.062	-42.034			9	+51.273	-20.696							12	-58.487	+20.184	65 2698	10.0	
9	+24.325	-59.048			17	+51.465	-49.913	66 2515	9.2					9	-58.170	+0.958			
9	631 +24.487	-37.447			26	+51.602	-42.092	66 2514	8.8					9	-58.106	+46.002			
10	+24.491	-36.687			9	+51.963	-15.211							9	-58.046	+27.735			
10	+24.792	-12.095			13	+52.188	-15.746							11	-58.035	+64.664			
9	+25.390	-54.245			9	+53.068	-8.031							10	-57.988	+48.027			
11	+25.398	-43.135			15	+53.122	-2.335	65 2697	9.5					10	-57.824	+36.926			
9	+25.417	-36.008			10	+53.281	-39.468							9	-57.799	+12.204			
9	+26.166	-51.842			9	+53.347	-23.896							15	-57.278	+32.233	65 2699	9.6	
10	+26.440	-7.329	66 2501	10.0	10	+53.554	-32.260							11	-57.267	+17.173			
11	+27.654	-15.488			9	+53.588	-42.104							9	-56.905	+21.516			
15	+27.715	-37.410	66 2502	9.7	20	+53.675	-8.265	66 2516	8.8					9	-56.889	+1.718			
9	641 +27.999	-23.671			9	701 +54.434	-0.075												
10	+28.646	-22.315			16	+55.910	-22.314	66 2517	9.4										
13	+28.851	-61.475	66 2503	9.9	9	+55.948	-39.305												
10	+29.449	-22.503			24	+57.117	-11.587	66 2518	8.6										
9	+30.015	-16.442			9	+57.682	-17.357												
9	+30.252	-11.382			10	+57.792	-55.603												
14	+30.818	-14.542			10	+58.021	-8.140												
9	+30.911	-14.556	66 2504	9.6	44	+58.275	-12.469	66 2519	7.3										
10	+31.648	-51.765			10	+58.763	-9.796												
12	+33.143	-41.103			13	+58.827	-22.386	66 2520	9.9										

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
9	51,	+28'556	65 2700	10'0	12	111,	+25'901	65 2710	10'0	15	171,	+15'893	65 2730	9'9	11	231,	+45'060	64 2864	10'0
13	-56'208	+7'110			11	-43'612	+22'341			12	-32'391	+63'942			10	-18'702	+53'254		
10	-56'095	+26'630			9	-43'491	+23'091	9	-32'282	+19'898	10	-18'555	+11'159						
11	-55'917	+47'442			11	-42'566	+34'589	11	-32'160	+12'054	10	-18'468	+11'614						
10	-55'492	+35'130			11	-42'476	+34'591	9	-31'586	+43'194	11	-17'964	+53'949						
12	-55'489	+59'517	65 2701	10'0	9	-42'472	+47'478	64 2836	9'2	10	-31'567	+29'404	64 2846	9'0	10	-17'928	+25'872	65 2740	10'0
9	-55'040	+31'058			9	-42'334	+20'291			9	-31'523	+50'265			11	-17'409	+10'365		
10	-55'035	+21'195			9	-42'333	+37'391			9	-31'463	+48'108			10	-17'386	+45'700		
9	-55'027	+38'941			18	-42'086	+60'950			9	-31'385	+54'211			19	-17'217	+56'768		
10	-54'858	+55'837			9	-41'994	+56'399			9	-31'368	+42'932			10	-17'059	+55'093		
12	61	+29'987	65 2701	10'0	9	-41'882	+57'310	65 2712	9'4	18	181	+55'985	65 2732	7'9	24	241	+54'344	64 2868	8'6
11	-54'511	+54'864			17	-41'654	+16'736			9	-30'975	+26'464			10	-16'737	+59'862		
10	-54'444	+37'101			9	-41'418	+47'075			44	-30'770	+37'965			14	-16'657	+24'226		
10	-54'293	+51'211			10	-41'002	+0'091			10	-30'451	+24'166			10	-16'434	+48'169		
11	-54'142	+17'623			9	-40'919	+34'814			13	-30'259	+58'369			22	-16'101	+58'644		
9	-54'105	+50'254	65 2702	9'2	15	-40'859	+29'916	65 2713	9'6	11	-30'115	+25'924	65 2733	9'4	9	-16'000	+24'164	65 2743	9'2
11	-53'586	+37'873			16	-40'836	+19'105			9	-29'922	+8'787			9	-15'906	+53'417		
9	-53'558	+20'831			16	-40'780	+20'862			15	-29'859	+21'194			11	-15'694	+29'636		
9	-53'507	+57'209			18	-40'486	+46'008			9	-29'856	+35'753			16	-15'618	+52'149		
10	-53'434	+44'561			9	-40'476	+35'547			9	-29'073	+50'348			9	-15'456	+9'628		
9	71	+51'069	65 2704	9'9	10	-40'471	+36'111	65 2719	10'0	12	-28'923	+24'662	65 2733	9'4	9	-15'452	+15'363	65 2742	8'4
9	-53'322	+18'225			10	-40'194	+44'558			16	-28'919	+2'286			24	-15'245	+2'199		
10	-53'129	+32'283			9	-40'186	+41'087			9	-28'797	+16'230			10	-15'035	+55'093		
11	-52'823	+34'725			12	-40'170	+44'314			9	-28'622	+24'100			14	-14'142	+24'907		
10	-52'630	+0'388			12	-39'917	+23'949			10	-28'182	+3'861			11	-14'132	+50'911		
9	-51'456	+2'388	65 2706	10'0	11	-39'876	+15'940	65 2718	7'0	12	-28'058	+49'042	64 2850	10'0	9	-13'912	+62'866	65 2748	10'0
9	-51'347	+61'038			11	-39'872	+49'722			9	-28'054	+6'777			9	-13'757	+41'784		
17	-51'252	+24'826			47	-39'546	+16'573			10	-27'806	+29'205			9	-13'756	+37'441		
9	-50'723	+2'343			9	-39'159	+30'090			10	-27'496	+53'391			10	-13'614	+25'334		
9	-50'150	+35'731			9	-39'092	+47'237			10	-27'169	+33'895			9	-12'559	+53'371		
12	81	+48'763	65 2707	10'0	10	-39'081	+64'861	65 2721	9'9	15	-26'846	+57'159	65 2736	9'9	10	-12'202	+49'705	65 2750	9'6
10	-49'900	+64'810			14	-38'313	+39'495			10	-26'836	+47'415			16	-11'755	+63'936		
11	-49'835	+59'733			9	-38'304	+45'493			10	-26'825	+37'335			10	-11'204	+8'546		
12	-49'446	+32'373			10	-38'251	+53'756			12	-26'701	+63'116			14	-10'985	+50'877		
11	-49'357	+53'021			17	-38'146	+47'498			11	-20'270	+27'438			9	-10'740	+25'082		
9	-49'129	+12'658	65 2708	9'9	11	-38'102	+39'193	65 2722	9'2	9	-25'676	+49'612	64 2853	9'9	10	-10'693	+51'664	65 2750	9'6
14	-49'081	+37'473			9	-38'068	+17'505			10	-25'260	+3'578			10	-10'626	+54'097		
10	-49'074	+63'990			16	-38'061	+29'136			11	-24'732	+51'827			10	-10'593	+51'331		
10	-48'792	+36'532			18	-37'715	+20'756			11	-24'624	+54'977			10	-10'162	+60'554		
9	-48'718	+1'448			10	-37'336	+63'644			13	-24'000	+63'708			9	-10'042	+42'929		
12	91	+9'974	65 2705	9'6	9	-37'044	+45'734	65 2725	8'2	9	-23'620	+33'176	65 2737	10'0	9	-9'308	+41'715	65 2750	9'6
14	-48'522	+24'652			24	-36'839	+50'919			11	-23'606	+25'098			9	-9'269	+55'752		
15	-48'482	+43'727			11	-36'688	+27'001			14	-23'309	+24'296			10	-9'261	+56'363		
11	-48'362	+55'057			9	-36'444	+51'612			9	-22'864	+37'253			9	-8'886	+17'825		
16	-48'140	+6'765			9	-36'298	+33'029			12	-22'591	+36'313			9	-8'233	+33'851		
12	-47'819	+34'319	65 2709	8'8	11	-35'908	+28'207	65 2726	9'2	12	-22'495	+1'243	65 2739	10'0	15	-8'202	+37'426	65 2750	9'6
11	-47'760	+52'375			9	-35'851	+50'306			10	-22'469	+24'754			9	-8'191	+62'543		
9	-46'800	+31'563			10	-35'787	+51'108			16	-21'752	+5'764			11	-8'110	+35'951		
9	-46'627	+30'951			11	-35'577	+48'886			10	-21'518	+51'283			10	-7'577	+55'177		
11	-46'576	+42'830			19	-35'407	+19'879			19	-21'390	+60'818			10	-7'521	+21'225		
9	101	+12'458	64 2832	8'8	9	-35'262	+48'138	65 2727	9'4	10	-21'279	+30'424	65 2739	10'0	16	-7'389	+61'146	65 2751	10'0
10	-46'319	+50'101			11	-35'260	+32'336			9	-21'040	+51'457			9	-6'827	+55'517		
9	-46'235	+62'587			9	-35'101	+64'610			9	-20'991	+52'830			10	-6'753	+31'123		
9	-46'065	+20'692			17	-34'919	+19'818			10	-20'934	+35'028			9	-6'744	+58'309		
9	-45'749	+31'391			11	-34'744	+48'422			9	-20'355	+54'217			9	-6'739	+62'566		
20	-45'608	+58'315	65 2728	8'5	24	-34'516	+14'956	65 2728	8'5	9	-20'259	+26'632	65 2739	10'0	10	-6'197	+58'889	65 2751	10'0
19	-45'544	+29'813			9	-34'448	+26'172			10	-19'949	+38'348			10	-5'881	+49'715		
9	-44'969	+45'410			14	-34'245	+54'084			10	-19'830	+25'999			11	-5'841	+41'707		
10	-44'737	+35'851			11	-33'893	+6'578			12	-19'769	+21'424			9	-5'834	+54'664		
10	-44'085	+27'250			9	-33'241	+57'399			9	-19'269	+17'372			10	-5'704	+32'679		

RECTANGULAR CO-ORDINATES.

14° 24', - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
9	- 5'669	+27'269			9	+11'058	+31'170			16	+23'583	+41'882	65 2777	9'4	9	+35'331	+3'850		
9	- 5'199	+56'400			10	+11'451	+41'182			12	+23'835	+48'258	65 2778	9'7	10	+36'029	+2'214		
10	- 4'974	+26'448	65 2752	9'8	9	+11'655	+63'398			10	+23'849	+17'361			12	+36'235	+38'928		
10	- 4'757	+10'539			9	+12'005	+24'883			12	+23'947	+43'602	65 2779	10'0	9	+36'796	+51'746		
9	- 3'562	+4'768			9	+12'321	+40'607			9	+25'146	+30'712			17	+36'898	+18'163	65 2790	9'3
10	- 3'476	+0'772	65 2753	10'0	11	+12'339	+2'154	65 2768	9'8	10	+25'377	+64'277			9	+37'093	+39'147		
9	- 2'817	+38'699			15	+12'481	+50'348	65 2769	9'6	9	+25'536	+34'080			9	+37'439	+14'150		
14	- 2'680	+46'862	65 2754	9'9	9	+12'506	+44'419			10	+25'601	+3'093	65 2780	10'0	9	+37'447	+25'039		
11	- 1'715	+7'920	65 2755	9'4	9	+12'548	+5'741			10	+25'774	+9'543			11	+37'755	+10'381		
16	- 1'704	+63'925	64 2887	9'4	10	+12'691	+58'379			9	+25'914	+58'520			10	+37'758	+16'845		
	301					361					421					481			
17	- 1'291	+62'875	64 2888	9'4	12	+12'705	+61'429			9	+25'950	+2'523			9	+37'941	+59'614		
16	- 0'931	+63'621	64 2890	9'6	10	+13'586	+64'723			11	+26'052	+18'506			15	+38'018	+41'967		
10	- 0'603	+1'490			14	+13'792	+53'996	65 2770	9'9	18	+26'075	+42'342	65 2781	9'2	9	+38'082	+20'857		
9	- 0'491	+50'423			9	+13'813	+47'837			20	+26'430	+12'388	65 2782	8'9	10	+38'153	+39'148		
9	- 0'226	+46'622			9	+14'073	+29'686			9	+26'438	+31'968			9	+38'215	+36'250		
10	+0'030	+46'516			9	+14'238	+58'643			9	+26'682	+15'099			10	+38'509	+60'140		
12	+0'382	+25'901	65 2756	9'7	9	+14'281	+48'522			11	+26'795	+41'967			16	+38'652	+16'345	65 2792	9'4
12	+0'771	+22'561	65 2757	9'4	11	+14'373	+33'357	65 2771	9'8	10	+27'847	+39'400			10	+38'655	+54'334		
9	+0'783	+61'055			10	+14'392	+30'173			11	+27'975	+47'112			10	+39'179	+9'307		
10	+1'006	+61'803			9	+14'639	+17'715			9	+28'167	+42'339			15	+39'251	+60'705	64 2948	9'6
	311					371					431					491			
10	+1'121	+44'677			11	+14'887	+20'929	65 2772	10'0	10	+28'275	+42'782			10	+39'370	+48'420		
9	+1'146	+0'216			9	+14'971	+42'806			10	+28'333	+43'778			15	+40'135	+32'051	65 2794	9'9
9	+1'580	+34'451			9	+14'976	+42'133			9	+28'459	+61'965			10	+40'341	+39'763		
9	+2'010	+14'312			9	+15'140	+33'506			11	+28'682	+10'229	65 2784	10'0	24	+40'891	+17'919	65 2795	8'5
11	+2'362	+55'177			18	+15'414	+62'258	64 2910	9'0	12	+28'716	+62'369			10	+41'163	+23'493		
18	+3'320	+63'467	64 2894	9'4	17	+15'531	+56'310	64 2911	9'4	9	+28'722	+62'403			12	+41'799	+25'343	65 2797	9'9
9	+3'698	+55'852			10	+15'639	+34'355			9	+28'743	+17'091			9	+42'065	+32'225		
9	+4'160	+13'774			11	+16'113	+3'667	65 2773	10'0	9	+28'867	+47'690			10	+42'588	+51'330		
10	+4'303	+39'705			11	+16'246	+47'038			9	+29'444	+57'544			10	+42'736	+18'301		
21	+4'523	+39'238	65 2758	8'8	16	+16'271	+16'384	65 2774	9'4	9	+29'980	+8'800			10	+43'099	+34'078		
	321					381					441					501			
10	+4'581	+18'009			10	+16'598	+47'822			9	+30'146	+60'759			11	+43'297	+30'371		
10	+4'846	+36'635	65 2760	10'0	9	+17'080	+41'710			9	+30'156	+44'262			10	+43'367	+48'626		
10	+4'952	+7'183	65 2761	9'8	24	+17'651	+25'839	65 2775	8'8	10	+30'854	+1'518			11	+43'566	+16'658	65 2798	10'0
11	+5'082	+31'292	65 2762	9'6	11	+17'777	+46'276			18	+30'872	+58'994	64 2934	9'0	16	+44'078	+16'075	65 2799	9'4
10	+5'206	+63'805			19	+17'828	+24'800	65 2776	9'3	9	+31'223	+28'610			10	+44'118	+36'165		
15	+5'510	+62'187	64 2896	9'6	9	+18'007	+11'053			9	+31'579	+39'288			9	+44'284	+24'564		
11	+5'625	+64'593			9	+18'450	+56'018			9	+31'662	+8'233			9	+44'555	+64'128		
11	+5'908	+57'639			9	+18'715	+0'255			9	+31'783	+54'910			10	+44'568	+51'134		
10	+6'158	+58'427			10	+18'774	+51'248			15	+32'115	+11'699	65 2786	9'6	10	+44'872	+9'725		
9	+7'649	+46'646			10	+19'141	+3'780			9	+32'254	+57'641			15	+45'008	+33'352	65 2800	9'3
	331					391					451					511			
24	+7'894	+62'897	64 2899	8'7	9	+19'208	+57'404			16	+32'368	+63'069	64 2937	9'3	11	+45'030	+13'978		
9	+7'910	+56'009			10	+19'580	+33'270			11	+32'437	+41'428			11	+45'066	+64'607	64 2953	10'0
10	+8'122	+31'074			10	+19'718	+64'699			10	+32'857	+55'012			10	+45'092	+0'119		
12	+8'648	+1'732	65 2764	10'0	9	+20'019	+0'901			9	+32'989	+35'632			11	+45'098	+7'583		
11	+8'757	+40'192	65 2765	9'6	10	+20'234	+10'029			17	+33'206	+62'549	64 2938	9'2	11	+45'482	+32'318		
11	+8'818	+60'175			9	+20'387	+46'358			10	+33'264	+45'205			12	+45'491	+45'166	65 2801	9'9
9	+8'844	+63'109			9	+20'418	+16'653			9	+33'491	+50'722			9	+45'530	+4'117		
9	+8'962	+36'414			9	+20'441	+57'147			10	+33'498	+4'203			10	+45'546	+11'752	65 2802	9'4
9	+8'963	+54'802			10	+20'706	+60'205			9	+33'655	+18'358			13	+45'710	+14'487		
10	+8'992	+62'170			9	+21'267	+62'231			15	+33'794	+36'200	65 2787	9'8	12	+46'542	+28'905		
	341					401					461					521			
9	+9'252	+43'959			9	+21'295	+23'219			15	+33'810	+54'691	64 2940	9'6	9	+46'582	+53'558		
11	+9'275	+22'301			11	+21'666	+28'236			11	+33'824	+50'816			10	+46'805	+45'678		
9	+10'214	+14'873			10	+21'698	+52'156			11	+34'046	+17'923			17	+46'841	+36'294	65 2803	9'0
10	+10'238	+34'894	65 2766	10'0	9	+21'873	+63'477			9	+34'280	+59'636			11	+46'875	+14'290		
9	+10'301	+61'753			13	+21'895	+55'797	64 2925	9'9	15	+34'318	+34'158	65 2789	9'6	10	+46'974	+13'956		
10	+10'448	+57'071			9	+22'413	+47'440			16	+34'406	+49'422	65 2788	9'5	10	+47'207	+18'611		
9	+10'512	+2'624			9	+22'425	+56'568			9	+34'470	+8'505			11	+47'388	+25'599		
11	+10'555	+31'920	65 2767	9'9	9	+22'623	+60'850			10	+34'781	+14'142			11	+47'501	+15'221		
9	+10'689	+50'714			9	+22'945	+45'924			10	+34'796	+52'676			13	+47'678	+52'830	65 2804	9'9
9	+10'958	+47'381			9	+23'329	+6'363			10	+34'851	+11'736			11	+47'991	+14'036		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531					591					651					711			
11	+48°096	+19°290			10	+60°091	+14°228			9	-54°627	-21°641			9	-34°157	-18°875		
10	+48°336	+18°405			10	+60°161	+3°767			10	-54°600	-42°153			10	-33°760	-54°183		
9	+48°469	+35°912			9	+60°171	+24°561			9	-53°821	-14°428			32	-32°780	-3°280	65	2729 8.8
10	+48°548	+50°486			13	+60°312	+19°952	65	2823 9.6	18	-53°701	-22°306	66	2517 9.4	9	-32°711	-14°606		
11	+48°750	+49°656			9	+60°540	+61°844			32	-53°287	-11°454	66	2518 8.6	9	-32°162	-37°345		
15	+48°930	+38°555	65	2805 9.9	9	+60°654	+18°870			9	-53°227	-21°796			22	-32°031	-58°645	66	2533 9.0
12	+48°937	+19°068			12	+61°159	+6°846	65	2825 10.0	11	-52°629	-7°961			14	-31°999	-63°821	66	2532 9.9
14	+49°116	+21°922	65	2807 9.6	11	+61°162	+9°762	65	2825 9.9	9	-52°447	-39°193			31	-31°939	-3°244	65	2731 8.9
11	+49°151	+48°410	65	2806 10.0	10	+61°320	+51°874			11	-52°291	-17°177			9	-31°822	-57°387		
10	+49°192	+35°970			10	+61°493	+12°128			9	-52°244	-1°771			9	-31°819	-13°784		
	541					601					661					721			
17	+49°388	+22°641	65	2808 9.4	12	+61°613	+7°786	65	2827 10.0	46	-52°061	-12°254	66	2519 7.3	12	-31°748	-12°466	66	2535 10.0
15	+49°701	+12°630	65	2809 9.4	11	+61°634	+49°639			9	-52°045	-11°263			13	-30°894	-53°922	66	2534 10.0
11	+49°886	+24°956			16	+61°723	+41°747	65	2824 9.6	12	-51°870	-4°845			9	-30°167	-51°068		
10	+49°917	+41°214			11	+61°970	+24°451			11	-51°763	-9°555			48	-30°122	-7°830	66	2538 7.0
10	+50°011	+7°644			9	+62°069	+33°412			9	-51°407	-8°235			13	-30°063	-28°680	66	2536 10.0
9	+50°150	+48°837			16	+62°320	+23°593	65	2829 9.4	12	-50°801	-22°035	66	2520 9.9	9	-29°904	-55°843		
9	+50°193	+21°841			10	+62°461	+38°516			13	-50°272	-14°823	66	2521 9.8	9	-29°812	-33°968		
11	+50°332	+24°084			9	+62°572	+56°140			15	-49°842	-21°627	66	2522 9.6	13	-29°726	-28°778	66	2537 10.0
13	+51°219	+26°053	65	2810 9.6	10	+62°664	+52°033			12	-49°449	-55°307			15	-28°373	-6°325	65	2734 9.2
10	+51°268	+18°407			9	+62°935	+60°308			13	-48°672	-5°940	65	2703 9.7	9	-28°317	-57°193		
	551					611					671					731			
9	+51°313	+26°813			19	+63°127	+31°697	65	2831 8.8	12	-47°924	-21°525	66	2524 10.0	15	-27°943	-38°379	66	2539 9.2
11	+51°406	+18°047			15	+63°388	+45°489	65	2830 9.3	11	-47°908	-8°793			9	-27°901	-53°829		
10	+51°662	+5°688			10	+64°276	+19°018			15	-47°691	-36°018	66	2523 9.5	10	-26°819	-5°725		
11	+51°884	+20°261			11	+64°358	+44°273	65	2832 10.0	11	-47°518	-14°522			9	-26°562	-12°346		
10	+51°968	+27°761			10	+64°447	+37°211			11	-47°294	-56°977			10	-26°064	-19°292		
14	+52°105	+8°248	65	2812 9.6	9	+64°679	+16°342			15	-47°158	-26°383	66	2525 9.6	9	-25°246	-52°905		
9	+52°304	+20°033			9	+64°809	+16°880			14	-46°065	-51°112	66	2527 9.9	10	-25°146	-60°411		
10	+52°650	+18°756			12	+64°957	+27°107	65	2833 10.0	15	-45°865	-61°613	66	2526 9.8	9	-25°072	-52°646		
9	+52°731	+33°600			12	-63°645	-13°921			11	-45°704	-13°096			9	-24°896	-1°082		
14	+53°033	+49°379	65	2811 10.0	10	-63°193	-14°234			9	-45°472	-17°335			11	-24°475	-5°464	65	2735 10.0
	561					621					681					741			
10	+53°068	+41°364			9	-62°962	-5°521			9	-43°627	-0°858			10	-24°469	-43°280		
9	+53°349	+16°237			29	-62°797	-17°174	66	2511 8.7	9	-43°120	-48°467			11	-24°459	-39°174		
13	+53°474	+16°508	65	2814 9.8	12	-62°682	-27°935			9	-41°491	-1°619			9	-24°074	-13°169		
9	+53°721	+48°661			12	-62°268	-1°254			11	-41°458	-45°477			14	-23°873	-42°938	66	2540 9.5
12	+53°769	+29°465			11	-62°038	-19°164			9	-40°756	-22°753			9	-23°794	-2°908		
10	+53°829	+10°131			9	-61°990	-43°114			10	-40°396	-16°988			16	-23°156	-62°136	66	2541 9.4
9	+53°902	+18°188			9	-60°621	-29°517			10	-40°289	-42°361			12	-23°093	-8°472	66	2542 9.9
9	+54°075	+55°684			9	-60°067	-1°463			13	-40°217	-0°004	65	2714 9.8	12	-21°540	-38°959	66	2543 9.5
10	+54°098	+3°095			9	-59°927	-18°202			9	-39°854	-34°829			11	-21°331	-55°091		
9	+54°186	+20°743			12	-59°797	-47°322	66	2512 10.0	18	-39°117	-11°162	66	2529 9.4	12	-21°090	-54°854		
	571					631					691					751			
10	+54°211	+4°983			9	-59°526	-31°924			23	-38°782	-64°742	66	2528 9.2	20	-20°953	-38°867	66	2545 9.0
28	+54°577	+60°564	64	2964 8.0	28	-58°979	-41°657	66	2513 9.1	12	-38°000	-49°959			28	-20°608	-16°477	66	2546 9.0
9	+55°251	+19°112			9	-58°454	-20°959			9	-37°854	-46°230			9	-20°526	-50°463		
16	+55°486	+54°750	64	2966 9.4	9	-58°371	-40°939			10	-37°850	-40°125			20	-19°892	-28°241	66	2547 9.2
10	+55°493	+50°330			9	-58°168	-15°449			9	-37°770	-2°668			9	-19°886	-18°587		
20	+55°726	+58°058	64	2968 8.8	15	-57°939	-2°520	65	2697 9.5	9	-37°126	-11°529			9	-19°761	-40°882		
11	+55°970	+23°831			12	-57°915	-15°964			9	-36°551	-26°071			10	-18°951	-29°727		
9	+56°334	+46°067			9	-57°574	-8°218			0	-36°349	-60°259			9	-17°887	-68°182		
12	+56°623	+22°833	65	2816 10.0	26	-56°948	-8°390	66	2516 8.8	9	-36°074	-23°261			9	-17°299	-62°096		
15	+56°768	+51°722	65	2815 9.4	9	-56°897	-30°185			9	-36°042	-48°395			9	-15°635	-61°470		
	581					641					701					761			
10	+57°007	+18°814			10	-56°798	-0°168			10	-36°029	-41°797			10	-15°556	-3°271		
10	+57°085	+39°776			9	-56°688	-58°909			20	-35°993	-65°205	66	2530 8.4	12	-14°665	-33°489	66	2548 10.0
11	+57°679	+16°110	65	2817 10.0	32	-56°585	-42°283	66	2514 8.8	27	-35°870	-63°371			12	-14°037	-58°701		
13	+58°145	+18°204	65	2818 9.6	9	-56°333	-40°155			16	-35°584	-1°384	65	2724 9.8	13	-13°359	-6°228	65	2745 9.4
11	+58°287	+5°864	65	2819 10.0	21	-56°134	-50°104	66	2515 9.2	9	-35°563	-38°858			9	-12°640	-40°689		
12	+59°114	+7°266	65	2821 10.0	11	-55°329	-32°329			11	-35°058	-20°821			9	-12°255	-52°332		
17	+59°120	+20°737	65	2820 9.2	11	-55°074	-39°560			10	-34°737	-41°363			9	-12°111	-36°487		
11	+59°125	+11°779			9	-54°923	-59°152			9	-34°718	-59°414			9	-11°425	-1°754		
12	+59°479	+10°530	65	2822 10.0	9	-54°892	-37°922			14	-34°322	-29°491	66	2531 9.8	9	-11°355	-55°349		
9	+60°018	+18°558			9	-54°653	-0°210			11	-34°304	-34°841			11	-10°974	-45°975		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
14	771 -10° 791	-41° 074	66 2549	9.5	9	+16° 287	-15° 068			11	+33° 870	-41° 718			13	+47° 590	-41° 352	66 2596	10.0
10	-10° 102	-36° 729			9	+16° 557	-10° 592			9	+33° 937	-7° 184			9	+47° 799	-46° 102		
11	-10° 040	-46° 700			9	+17° 079	-48° 559			9	+34° 005	-49° 753			9	+47° 876	-35° 492		
9	-9° 570	-35° 112			9	+17° 114	-7° 438			12	+34° 531	-58° 668	66 2590	10.0	9	+48° 047	-39° 077		
12	-9° 383	-24° 033	66 2550	10.0	9	+17° 332	-60° 526			9	+35° 116	-16° 896			9	+48° 086	-20° 713		
9	-8° 559	-57° 756			28	+18° 172	-60° 055	66 2565	8.5	10	+35° 189	-52° 448			10	+48° 222	-31° 034		
14	-8° 268	-53° 811	66 2551	9.8	12	+18° 172	-48° 452			11	+35° 364	-38° 037			9	+48° 522	-17° 818		
13	-7° 484	-55° 473	66 2552	9.8	10	+18° 366	-12° 816			9	+35° 483	-57° 482			11	+48° 610	-27° 293		
9	-7° 240	-26° 958			9	+19° 818	-48° 961			9	+35° 516	-22° 665			32	+48° 924	-24° 103	66 2597	8.6
9	-6° 828	-26° 457			9	+19° 923	-16° 500			9	+36° 055	-11° 512			9	+49° 022	-14° 328		
	781					841					901					961			
9	-6° 770	-12° 275			30	+20° 812	-16° 218	66 2567	9.0	12	+36° 299	-30° 449			9	+49° 263	-32° 562		
9	-6° 437	-44° 484			14	+22° 243	-24° 829	66 2568	9.6	9	+36° 328	-9° 317			9	+49° 616	-53° 582		
19	-6° 286	-33° 517	66 2553	9.2	9	+22° 514	-2° 182			9	+36° 716	-4° 473			9	+49° 798	-31° 998		
10	-5° 581	-47° 504			15	+22° 720	-11° 112	66 2569	9.6	10	+36° 735	-18° 469			11	+50° 265	-44° 370		
10	-5° 273	-3° 387			10	+22° 810	-14° 466			12	+36° 811	-56° 581			12	+50° 415	-54° 725		
9	-5° 183	-54° 111			22	+23° 093	-35° 305	66 2571	9.0	9	+37° 356	-0° 751			22	+50° 466	-11° 251	66 2598	8.8
11	-4° 235	-33° 267			13	+23° 170	-17° 974	66 2570	10.0	9	+38° 006	-21° 384			9	+50° 577	-63° 998		
12	-3° 810	-60° 086			9	+23° 642	-6° 801			26	+38° 133	-1° 007	65 2791	9.0	12	+50° 728	-7° 512	66 2599	10.0
10	-2° 285	-54° 967			9	+23° 967	-51° 295			11	+38° 304	-38° 613			32	+51° 013	-31° 994	66 2600	8.0
11	-1° 978	-35° 758	66 2554	10.0	11	+24° 161	-10° 807	66 2572	9.7	9	+38° 535	-27° 080			12	+51° 070	-35° 809	66 2601	9.6
	791					851					911					971			
15	-0° 438	-14° 407	66 2555	9.4	9	+24° 432	-8° 548			10	+38° 674	-39° 405			9	+51° 102	-30° 650		
23	+0° 119	-7° 004	66 2556	9.2	12	+24° 435	-59° 420			16	+38° 725	-1° 451	65 2793	9.5	11	+51° 382	-45° 554		
9	+1° 374	-16° 429			9	+25° 674	-40° 368			9	+38° 747	-27° 760			15	+51° 487	-64° 519	66 2604	9.4
9	+1° 388	-49° 876			9	+26° 630	-30° 784			10	+38° 823	-34° 250			10	+51° 751	-62° 724		
9	+1° 677	-29° 542			9	+26° 669	-54° 957			9	+39° 056	-30° 068			10	+52° 035	-14° 172		
9	+2° 981	-44° 896			34	+26° 734	-14° 958	66 2573	8.8	9	+39° 735	-13° 243			15	+52° 183	-10° 511	66 2602	9.4
10	+4° 009	-43° 878			9	+26° 735	-4° 617			10	+39° 970	-52° 780			15	+52° 382	-28° 722	66 2603	9.4
12	+4° 010	-32° 281			9	+26° 748	-52° 908			9	+40° 348	-50° 293			10	+52° 666	-46° 940		
11	+4° 640	-33° 605			9	+27° 379	-41° 870			10	+40° 439	-20° 093			20	+52° 694	-0° 977	65 2813	9.2
14	+4° 721	-5° 207	65 2759	9.4	9	+27° 545	-38° 951			10	+40° 717	-21° 167			9	+52° 787	-39° 428		
	801					861					921					981			
10	+5° 258	-34° 062			9	+27° 791	-54° 397			11	+40° 760	-7° 094	65 2796	10.0	9	+52° 968	-46° 560		
15	+5° 362	-12° 548	66 2557	9.4	26	+27° 849	-3° 275	65 2783	9.2	10	+40° 864	-8° 135			24	+53° 570	-40° 145	66 2606	8.8
9	+5° 501	-27° 542			14	+27° 869	-20° 791	66 2574	9.4	11	+41° 498	-22° 113			9	+53° 834	-2° 001		
36	+5° 717	-45° 109	66 2558	8.1	12	+28° 418	-35° 107	66 2576	9.6	9	+41° 678	-39° 107			9	+53° 989	-36° 941		
12	+5° 807	-34° 801	66 2559	9.8	12	+28° 445	-48° 253	66 2577	9.7	9	+41° 961	-18° 739			11	+54° 349	-59° 043		
11	+5° 871	-1° 581	65 2763	9.7	20	+28° 518	-12° 028	66 2575	9.3	9	+42° 316	-44° 337			9	+54° 404	-53° 057		
9	+7° 684	-28° 671			11	+28° 572	-52° 623			12	+42° 365	-19° 702	66 2591	9.9	9	+54° 429	-18° 915		
9	+7° 771	-27° 489			9	+28° 888	-30° 243			9	+42° 415	-10° 658			9	+54° 436	-30° 973		
11	+8° 131	-23° 679	66 2560	10.0	10	+28° 916	-44° 625			9	+42° 742	-35° 353			9	+54° 491	-28° 465		
9	+8° 211	-0° 102			11	+28° 968	-38° 521	66 2578	9.9	11	+43° 139	-42° 653			14	+54° 978	-10° 963	66 2607	9.4
	811					871					931					991			
21	+8° 713	-40° 730	66 2561	9.0	12	+29° 791	-54° 433			9	+43° 232	-53° 661			9	+55° 103	-53° 805		
12	+8° 784	-49° 483			9	+29° 927	-53° 377			9	+43° 417	-55° 040			14	+55° 658	-23° 069	66 2608	9.6
9	+8° 955	-28° 750			16	+30° 141	-34° 311	66 2580	9.2	14	+43° 547	-44° 760	66 2593	9.6	9	+55° 665	-51° 825		
24	+9° 104	-38° 931	66 2562	8.9	9	+30° 219	-50° 387			14	+43° 789	-18° 628	66 2592	9.4	12	+56° 038	-12° 373	66 2609	9.7
9	+9° 220	-35° 697			14	+30° 276	-62° 111	66 2583	9.9	9	+44° 215	-14° 214			9	+56° 414	-33° 847		
10	+9° 430	-31° 189			15	+30° 314	-18° 837	66 2579	9.3	10	+44° 424	-36° 123			12	+56° 603	-46° 957	66 2611	9.6
9	+9° 548	-50° 601			9	+30° 488	-37° 097			17	+44° 461	-22° 765	66 2594	9.3	21	+56° 636	-62° 771	66 2612	9.2
14	+9° 705	-8° 285	66 2563	9.3	9	+30° 532	-18° 908	66 2581	10.0	9	+44° 526	-41° 886			9	+56° 930	-22° 308		
9	+10° 798	-28° 860			12	+30° 543	-24° 524	66 2582	9.8	9	+44° 737	-31° 746			12	+57° 597	-12° 624	66 2610	9.6
9	+11° 579	-41° 004			9	+30° 617	-11° 828			9	+44° 840	-35° 787			9	+57° 690	-48° 087		
	821					881					941					1001			
9	+11° 949	-50° 779			10	+30° 641	-27° 144			9	+44° 966	-40° 001			9	+57° 824	-44° 579		
9	+12° 295	-28° 208			28	+30° 711	-0° 947	65 2785	8.9	9	+45° 533	-35° 475			11	+58° 625	-50° 565		
9	+12° 414	-33° 549			15	+30° 902	-24° 799	66 2584	9.3	11	+46° 068	-17° 718			10	+58° 634	-39° 235		
9	+12° 998	-37° 455			14	+31° 009	-16° 447	66 2585	9.6	12	+46° 770	-43° 024	66 2595	9.9	9	+58° 759	-38° 231		
14	+14° 133	-23° 761	66 2564	9.4	9	+31° 345	-47° 161			12	+46° 959	-0° 515			9	+58° 995	-12° 317		
10	+14° 336	-60° 021			16	+31° 434	-33° 297	66 2587	9.4	9	+47° 041	-5° 149			13	+59° 292	-22° 002	66 2613	9.6
10	+14° 507	-6° 935			11	+31° 551	-13° 358	66 2586	10.0	10	+47° 438	-51° 217			9	+60° 424	-27° 945		
9	+14° 530	-27° 170			10	+32° 594	-26° 002			9	+47° 465	-22° 221			9	+60° 629	-11° 011		
9	+15° 584	-6° 945			32	+33° 449	-54° 481	66 2588	8.4	9	+47° 474	-13° 272			15	+61° 160	-19° 625	66 2614	9.2
9	+16° 059	-57° 586			14	+33° 849	-40° 694	66 2589	9.6	11	+47° 490	-38° 456			12	+61° 190	-2° 069	65 2828	10.0

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1011,					PLATE CENTRE. 14 ^h 42 ^m , - 66°. Plate 327. 1892, June 14. PROVISIONAL CONSTANTS. a = - .01135 d = - .00036 b = + .00037 e = - .01135 c = - .4630 f = + .3843 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51,				111,				
9	+61.606	-21.024	66 2615	10.0	9	-64.806	+13.206	65 2805	9.9	9	-48.935	+37.354	65 2835	8.8	16	-14.420	+7.148	65 2869	8.9
9	+61.761	-39.926			9	-64.696	+12.884			26	-48.119	+43.566			9	-14.300	+7.055		
10	+61.902	-32.335			9	-64.503	+37.598			9	-47.803	+19.186			32	-14.222	+40.871	65 2871	7.8
9	+61.936	-28.743			9	-64.250	+14.208			10	-47.717	+27.302			11	-14.108	+36.101	65 2872	9.4
10	+62.386	-16.591			9	-63.964	+18.302			19	-47.684	+31.374			11	-13.868	+22.258	65 2873	9.3
9	+62.390	-15.301			9	-63.680	+13.031			10	-47.489	+27.803			17	-13.274	+31.254	65 2875	9.0
9	+62.456	-27.352			9	-63.666	+17.424			11	-47.019	+46.073			11	-12.952	+33.675	65 2876	9.4
9	+62.652	-27.388			10	-63.124	+20.992			9	-44.849	+34.441			9	-12.823	+55.714		
9	+62.739	-32.587			9	-63.108	+18.138			14	-44.317	+41.998			10	-12.756	+27.587		
9	+62.771	-10.619			11	-62.914	+21.736			40	-44.266	+48.237			9	-12.218	+18.208		
11	+63.521	-33.043	9	-62.575	+24.090	19	-44.104	+49.608	9	-11.789	+21.000								
9	+63.539	-35.463	11	-61.900	+11.754	9	-44.083	+7.001	10	-11.546	+0.969	65 2878	9.8						
11	+64.246	-1.590	11	-61.324	+25.271	9	-43.664	+12.404	9	-10.641	+41.886								
10	+64.299	-37.583	9	-61.200	+6.828	16	-43.293	+46.583	10	-10.209	+47.909	65 2880	9.6						
9	+64.466	-46.500	9	-61.194	+48.683	11	-42.515	+34.123	12	-9.589	+51.197	65 2881	9.4						
10	+64.960	-36.575	9	-60.734	+17.650	9	-41.940	+5.118	10	-9.156	+17.330	65 2882	9.9						
			9	-60.578	+17.295	24	-41.750	+28.604	10	-8.879	+27.888	65 2883	9.9						
			38	-60.468	+59.944	9	-40.713	+57.875	10	-8.643	+26.670	65 2884	9.8						
			9	-60.248	+19.548	10	-39.900	+38.650	11	-7.643	+4.553	65 2885	9.4						
			11	-59.156	+7.564	10	-37.958	+37.422	11	-7.200	+39.753	65 2886	9.4						
			19	-59.126	+57.529	10	-37.904	+41.850	9	-6.390	+14.025								
			9	-59.120	+54.217	14	-37.489	+40.083	9	-5.758	+23.342								
			10	-59.017	+28.850	11	-36.251	+60.612	32	-5.447	+44.328	65 2887	7.5						
			11	-58.397	+15.910	10	-35.173	+63.582	9	-4.252	+28.128								
			10	-57.633	+51.265	10	-35.114	+10.260	9	-3.362	+39.603								
			9	-57.583	+9.587	10	-33.556	+58.876	9	-2.307	+36.703								
			9	-56.806	+4.470	18	-31.991	+14.612	14	-2.204	+2.386	65 2888	9.3						
			9	-56.801	+2.570	9	-31.867	+43.784	9	-2.182	+16.513								
			9	-56.414	+23.384	11	-31.701	+15.836	30	-1.939	+42.316	65 2889	7.6						
			10	-55.687	+22.437	9	-30.751	+57.192	12	-0.895	+27.130	65 2891	9.3						
			10	-54.173	+15.808	11	-30.421	+41.035	14	-0.802	+26.716	65 2892	9.3						
			11	-53.849	+17.928	10	-29.820	+19.526	11	-0.337	+10.392	65 2893	9.6						
			14	-53.075	+20.546	10	-29.428	+56.554	9	+0.930	+28.299								
			10	-52.841	+5.640	9	-28.784	+8.234	36	+1.206	+9.170	65 2895	7.7						
			9	-52.420	+11.602	9	-28.422	+46.233	9	+1.276	+49.559								
			11	-52.111	+7.096	26	-28.305	+11.210	10	+6.107	+25.478	65 2898	10.0						
			10	-51.989	+10.370	9	-27.569	+19.504	9	+6.142	+8.409								
			11	-51.971	+41.673	14	-26.737	+62.544	10	+6.404	+46.351	65 2899	10.0						
			11	-51.791	+19.840	9	-26.708	+42.537	10	+6.780	+26.091	65 2900	10.0						
			9	-51.615	+14.119	15	-26.215	+22.821	19	+7.430	+12.504	65 2901	8.9						
			9	-50.784	+3.676	9	-25.679	+46.785	9	+8.668	+17.651								
			17	-50.601	+45.528	11	-25.181	+45.837	9	+8.724	+26.835								
			9	-50.477	+24.455	18	-24.935	+18.033	9	+9.001	+29.727								
			10	-50.219	+9.738	10	-24.115	+58.864	9	+10.436	+0.354								
			9	-50.081	+12.103	10	-23.660	+48.123	10	+10.596	+2.278								
			12	-50.070	+23.622	9	-23.441	+32.138	9	+10.648	+9.293								
			11	-50.023	+6.828	9	-22.339	+54.458	9	+10.888	+49.366								
			24	-49.855	+31.772	9	-22.292	+32.578	10	+11.844	+6.865	65 2903	9.9						
			10	-49.651	+7.790	22	-21.817	+15.067	24	+12.163	+46.253	65 2904	8.9						
			9	-49.535	+44.392	14	-21.793	+30.242	9	+12.534	+33.741								
						9	-21.415	+10.136	28	+12.958	+37.234	65 2905	8.4						
						10	-20.696	+3.745	10	+13.595	+3.139	65 2906	9.9						
						9	-19.393	+40.876	9	+14.160	+20.778								
						32	-18.205	+34.039	9	+15.385	+19.456								
						40	-17.663	+14.230	10	+15.544	+19.389	65 2907	9.4						
						10	-16.924	+27.754	10	+17.144	+9.421								
						9	-16.321	+10.654	9	+17.685	+53.941								
						9	-15.725	+11.032	9	+18.698	+12.457	65 2908	10.0						
						40	-15.708	+4.942	10	+20.854	+44.153	65 2909	9.6						
						9	-15.120	+8.797	10	+21.685	+25.213	65 2911	10.0						

RECTANGULAR CO-ORDINATES.

14^h 42^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	171					231					291					351			
9	+21° 852	+24° 430			10	-63° 882	-45° 926	66 2593	9° 6	9	-31° 587	-4° 160			28	-10° 954	-9° 790	66 2644	8° 2
9	+21° 082	+61° 663			9	-63° 658	-1° 549			9	-31° 470	-25° 010			9	-10° 909	-34° 983		
9	+21° 988	+18° 121			9	-63° 322	-18° 790			9	-31° 325	-4° 283			60	-10° 118	-10° 989	66 2645	6° 4
16	+22° 014	+50° 685	65 2910	9° 3	10	-60° 908	-39° 344			9	-31° 272	-39° 193			27	-9° 670	-10° 330	66 2647	8° 4
11	+22° 674	+32° 708	65 2912	9° 8	9	-60° 796	-43° 962	66 2595	9° 9	11	-30° 887	-32° 789	66 2625	9° 4	14	-9° 528	-26° 183	66 2646	9° 3
14	+23° 334	+2° 869	65 2913	9° 2	10	-60° 098	-42° 231	66 2596	10° 0	10	-30° 728	-47° 703	66 2624	9° 7	9	-9° 494	-4° 694		
10	+25° 342	+12° 017	65 2915	9° 7	9	-60° 096	-28° 135			9	-30° 144	-39° 560			9	-9° 482	-47° 138		
10	+25° 590	+7° 207	65 2916	9° 9	22	-60° 037	-24° 933	66 2597	8° 6	10	-29° 948	-30° 667	66 2626	10° 0	9	-8° 034	-37° 615		
11	+26° 712	+64° 293	64 3032	9° 4	9	-59° 402	-8° 263	66 2599	10° 0	9	-29° 388	-61° 512			9	-7° 432	-54° 859		
19	+26° 959	+36° 559	65 2917	8° 9	16	-59° 383	-12° 015	66 2598	8° 8	9	-29° 050	-10° 312			9	-7° 376	-21° 103		
	181					241					301					361			
48	+26° 998	+24° 833	65 2918	6° 0	15	-57° 901	-1° 604	65 2813	9° 2	9	-28° 460	-20° 290			9	-6° 448	-63° 308		
9	+28° 132	+22° 209			11	-57° 720	-11° 146	66 2602	9° 4	10	-28° 400	-3° 964			38	-6° 434	-49° 424	66 2648	8° 3
24	+28° 640	+11° 609	65 2919	8° 8	36	-57° 382	-32° 662	66 2600	8° 0	11	-28° 153	-6° 565	65 2854	9° 6	9	-6° 214	-17° 521		
11	+29° 712	+30° 011	65 2920	9° 6	9	-57° 207	-45° 024			9	-27° 680	-5° 766			11	-4° 772	-40° 026	66 2649	9° 6
9	+29° 850	+53° 436			10	-57° 027	-36° 466	66 2601	9° 6	9	-26° 739	-51° 322			9	-4° 352	-6° 694		
9	+30° 258	+36° 165			11	-56° 229	-29° 301	66 2603	9° 4	10	-26° 439	-0° 332	65 2856	9° 6	9	-4° 082	-1° 865		
9	+30° 835	+5° 822			9	-56° 002	-46° 146			9	-25° 896	-21° 245			15	-4° 051	-27° 448	66 2650	9° 2
19	+31° 139	+17° 839	65 2921	8° 9	11	-54° 908	-11° 395	66 2607	9° 4	9	-25° 634	-5° 290			9	-2° 966	-53° 653		
9	+31° 291	+22° 043			18	-54° 218	-40° 612	66 2606	8° 8	9	-25° 367	-12° 612			12	-2° 143	-26° 880	66 2651	9° 3
9	+31° 660	+45° 079			9	-53° 754	-12° 720	66 2609	9° 7	9	-25° 076	-35° 984			9	-1° 936	-43° 057		
	191					251					311					371			
14	+33° 094	+38° 764	65 2922	9° 2	12	-53° 365	-23° 419	66 2608	9° 6	11	-24° 896	-51° 982	66 2627	9° 9	9	-1° 690	-2° 138		
9	+33° 503	+54° 000			10	-52° 181	-12° 861	66 2610	9° 6	11	-24° 774	-12° 269	66 2628	9° 8	12	-0° 961	-4° 212	65 2890	9° 2
12	+37° 116	+50° 894	65 2923	9° 2	9	-50° 697	-47° 174	66 2611	9° 6	18	-24° 398	-6° 734	65 2859	8° 9	9	-0° 532	-26° 738		
9	+37° 823	+30° 606			10	-49° 832	-22° 099	66 2613	9° 6	10	-24° 085	-11° 597	66 2629	9° 9	12	-0° 066	-0° 078	65 2894	9° 3
15	+37° 956	+59° 891	64 3041	9° 2	12	-49° 536	-62° 940	66 2612	9° 2	10	-23° 372	-16° 648	66 2630	10° 0	9	+0° 319	-62° 983		
9	+38° 145	+21° 219			10	-49° 358	-2° 078	65 2828	10° 0	9	-21° 724	-63° 955	66 2631	10° 0	9	+0° 409	-50° 142		
15	+39° 352	+49° 813	65 2924	9° 2	9	-49° 244	-39° 318			11	-21° 568	-7° 054	66 2632	9° 3	9	+0° 486	-16° 039		
11	+40° 268	+39° 704	65 2925	9° 4	9	-49° 200	-38° 316			9	-21° 509	-7° 050			9	+0° 943	-52° 386		
11	+40° 426	+31° 528	65 2926	9° 9	9	-48° 452	-50° 635			9	-21° 318	-32° 786			9	+1° 306	-46° 639		
9	+41° 782	+40° 931			12	-48° 136	-19° 579	66 2614	9° 2	9	-20° 790	-16° 090			30	+1° 590	-4° 609	65 2896	8° 2
	201					261					321					381			
9	+44° 472	+63° 028	64 3048	10° 0	9	-47° 118	-16° 458			10	-20° 122	-61° 466	66 2633	9° 6	9	+2° 039	-42° 259		
9	+46° 040	+56° 756	64 3050	10° 0	9	-46° 478	-32° 212			11	-18° 877	-29° 361	66 2634	9° 6	9	+2° 405	-22° 732		
9	+46° 861	+24° 286			9	-46° 082	-39° 790			9	-18° 600	-46° 514			26	+2° 856	-6° 848	66 2653	8° 4
9	+47° 038	+44° 252			9	-44° 820	-32° 799	66 2615	10° 0	9	-17° 670	-8° 249			11	+3° 071	-9° 491	66 2654	9° 4
12	+48° 442	+34° 175	65 2927	9° 3	9	-43° 721	-37° 280			9	-17° 132	-42° 404			10	+4° 327	-6° 420	65 2897	9° 6
10	+49° 047	+34° 240	65 2928	10° 0	9	-43° 326	-7° 571			9	-16° 684	-46° 699			9	+5° 044	-49° 483		
10	+49° 583	+20° 469	65 2929	10° 0	9	-43° 134	-36° 218			9	-16° 516	-28° 170			9	+5° 662	-45° 654		
23	+50° 378	+35° 663	65 2930	8° 2	27	-42° 284	-22° 279	66 2616	8° 5	24	-16° 314	-28° 990	66 2635	8° 6	10	+5° 731	-56° 948		
9	+50° 503	+0° 270			12	-40° 122	-17° 705	66 2617	9° 4	9	-16° 310	-58° 849			9	+5° 823	-9° 328		
9	+51° 003	+1° 050			9	-39° 669	-46° 090			9	-16° 128	-6° 618			10	+7° 335	-32° 406		
	211					271					331					391			
28	+51° 257	+4° 238	65 2931	8° 0	9	-39° 415	-28° 839			14	-16° 010	-12° 398	66 2636	9° 2	9	+7° 469	-2° 082		
12	+53° 073	+41° 045	65 2932	9° 3	9	-38° 850	-32° 543			9	-15° 685	-26° 104			9	+7° 561	-52° 674		
9	+53° 642	+48° 246			10	-38° 455	-24° 472			11	-15° 660	-20° 685	66 2637	9° 7	10	+8° 607	-36° 552	66 2655	10° 0
10	+54° 068	+6° 033			10	-38° 088	-12° 355	66 2619	9° 8	9	-15° 577	-8° 259			15	+8° 695	-4° 617	65 2902	9° 0
10	+54° 370	+8° 340	65 2935	10° 0	14	-37° 583	-20° 535	66 2620	9° 2	10	-15° 436	-18° 455	66 2638	9° 9	21	+9° 244	-40° 391	66 2656	8° 9
11	+55° 152	+49° 080	65 2934	9° 4	28	-37° 444	-2° 928	65 2845	8° 4	12	-15° 245	-7° 160	66 2639	9° 3	9	+9° 332	-1° 753		
20	+55° 652	+14° 439	65 2936	9															

14^h 42^m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	411,					471,				PLATE CENTRE. 15 ^h 0 ^m , - 66°. Plate 1325. 1895, July 12. PROVISIONAL CONSTANTS. a = - .01147 d = + .00015 b = - .00031 e = - .01127 c = - .0057 f = + .0170 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f						51,			
9	+19.726	- 3.805			9	+49.232	-16.625			9	-51.680	+44.265			9	-51.428	+41.556		
16	+20.027	-25.968	66 2662	9.2	9	+50.618	-28.806			9	-50.954	+60.821			13	-50.954	+60.821		
12	+20.754	-56.943	66 2663	9.4	11	+50.910	-40.309	66 2684	10.0	10	-50.883	+31.913			10	-50.883	+31.913		
9	+21.221	-30.978			9	+51.206	-45.709			15	-50.857	+49.788	65 2941	9.9					
15	+21.366	-10.228	66 2664	9.3	10	+51.986	- 3.432	65 2933	10.0						9	-50.275	+19.830		
					9	+52.454	-29.140			10	-49.958	+25.340			11	-49.729	+27.680		
9	+21.881	-15.570			9	+53.564	-37.620			14	-49.694	+54.867	64 3062	9.6					
10	+22.159	-56.513	66 2665	9.7	9	+53.953	- 1.844			12	-49.588	+61.166							
9	+22.452	-46.849			9	+55.330	-42.097	66 2685	10.0										
9	+22.572	- 3.397			9	+55.330	-42.097												
9	+23.007	-18.126			13	+55.572	-60.319	66 2686	9.2										
	421					481													
9	+23.045	-60.417			9	+56.210	-13.400			11	-64.991	+34.005	65 2928	10.0	9	-49.528	+42.041		
9	+23.054	-15.735			9	+57.182	-59.677	66 2687	9.7	9	-64.499	+14.016			15	-49.474	+21.231	65 2942	10.0
36	+23.476	- 0.815	65 2914	7.9	9	+58.679	-55.393	66 2689	10.0	9	-63.916	+32.119			9	-49.385	+ 2.302		
9	+24.265	-39.551			9	+58.732	-17.828	66 2688	10.0	26	-63.774	+35.559	65 2930	8.2	11	-49.326	+13.076		
9	+24.476	-43.401			13	+62.180	- 1.365	65 2940	9.3	9	-63.729	+20.362			10	-49.024	+58.273		
					9	+62.484	-42.757			13	-63.479	+ 2.612			22	-48.819	+16.765	65 2944	9.0
10	+26.230	-20.462			9	+64.321	-31.619			14	-63.467	+20.329	65 2929	10.0	10	-48.686	+ 6.737		
10	+26.376	- 9.412	66 2666	9.8						10	-63.202	+17.834			16	-48.559	+ 6.903	65 2943	9.2
10	+27.110	-20.768								9	-62.828	+36.17			10	-48.402	+32.235		
9	+27.549	- 7.892								19	-61.449	+41.111	65 2932	9.3	9	-48.140	+63.435		
9	+27.732	-14.686								11					71				
	431				12	-61.429	+48.318			12	-61.429	+48.318			15	-48.061	+37.507	65 2946	9.9
9	+27.928	-41.507			9	-61.410	+ 9.860			9	-61.410	+ 9.860			15	-47.961	+35.350	65 2947	10.0
9	+28.185	-59.002			9	-61.320	+59.677			9	-61.320	+59.677			10	-47.832	+38.023		
13	+28.399	-28.008	66 2667	9.4	9	-61.134	+31.958			9	-61.134	+31.958			10	-47.669	+27.453		
11	+28.534	-45.467	66 2669	9.6						14	-61.106	+ 0.256			11	-47.637	+ 1.272		
9	+28.687	-40.699																	
										9	-61.018	+11.874			19	-47.228	+ 8.991	65 2945	9.2
11	+28.748	-14.386	66 2668	9.8						9	-60.884	+47.071			10	-46.686	+55.487		
42	+29.730	-15.916	66 2670	8.0						9	-60.825	+ 2.506			11	-46.313	+22.383		
10	+30.278	-49.832	66 2672	10.0						10	-60.690	+ 1.066			9	-46.296	+ 8.590		
9	+30.372	-52.948								28	-60.665	+ 4.264	65 2931	8.0	9	-45.660	+62.712		
10	+30.410	-44.660								21					81				
	441				9	-60.488	+11.576			9	-60.488	+11.576			40	-44.881	+28.782	65 2948	7.7
11	+30.425	-28.041	66 2671	9.9	9	-60.383	+35.793			9	-60.383	+35.793			9	-44.072	+ 2.675		
10	+31.276	-18.216	66 2673	10.0	15	-59.965	+49.261			15	-59.965	+49.261	65 2934	9.4	14	-43.601	+64.397	64 3070	9.9
9	+31.365	-23.640			9	-59.901	+14.676			9	-59.901	+14.676			10	-43.491	+27.148		
9	+31.838	-20.536			9	-59.835	+ 0.792			9	-59.835	+ 0.792			10	-43.442	+24.077		
11	+32.484	-26.943	66 2674	9.9															
										9	-59.631	+13.186			10	-43.073	+16.547		
10	+32.609	- 2.304								9	-59.376	+17.250			9	-42.926	+17.595		
9	+32.686	-47.146								10	-58.710	+21.639			11	-42.753	+14.167		
9	+33.894	-21.992								10	-58.494	+15.752			11	-42.035	+33.665		
11	+33.988	- 9.136	66 2675	9.6	9	-58.289	+51.830			9	-58.289	+51.830			10	-42.020	+13.621		
9	+34.420	-19.811								31					91				
	451				14	-57.987	+ 6.254			14	-57.987	+ 6.254			9	-41.432	+18.023		
10	+35.306	-27.248			14	-57.861	+ 8.568			14	-57.861	+ 8.568	65 2935	10.0	9	-41.265	+31.663		
9	+36.482	-13.570			9	-57.381	+42.266			9	-57.381	+42.266			9	-41.226	+ 4.724		
9	+36.733	-19.745			22	-56.999	+14.746			22	-56.999	+14.746	65 2936	9.0	9	-40.836	+33.121		
16	+36.819	-56.701	66 2676	9.0	9	-56.977	+25.472			9	-56.977	+25.472			9	-40.744	+ 0.592		
9	+37.486	-20.892																	
										9	-56.784	+21.118			22	-40.118	+57.133	64 3071	8.8
11	+38.234	-15.568	66 2677	9.6						10	-56.211	+24.811			9	-39.342	+46.792		
9	+38.283	- 9.915								9	-55.549	+26.466			10	-38.642	+10.340		
30	+40.165	-29.186	66 2678	8.5						10	-55.500	+53.931			10	-38.583	+55.248		
9	+40.920	-31.868								21	-55.093	+44.274	65 2937	9.0	11	-38.524	+38.465		
10	+41.580	-51.032	66 2679	9.6						41					101				
	461				9	-54.202	+34.807			9	-54.202	+34.807			11	-38.288	+15.533		
9	+41.873	-33.096			10	-53.604	+10.790			10	-53.604	+10.790			9	-37.953	+ 9.443		
9	+43.091	-25.154			10	-52.820	+39.898			10	-52.820	+39.898			12	-37.869	+28.787		
12	+43.102	-38.110	66 2680	9.6	10	-52.744	+37.181			10	-52.744	+37.181			10	-37.834	+40.896		
9	+43.906	-19.646			20	-52.731	+24.351	65 2938	8.9	9	-52.731	+24.351			9	-37.039	+47.449		
9	+43.979	-22.117																	
										9	-52.715	+32.563			14	-37.036	+62.126	64 3074	10.0
11	+44.482	-48.920	66 2681	9.4	13	-52.661	+39.009			13	-52.661	+39.009	65 2939	10.0	20	-36.528	+16.789	65 2949	9.2
9	+45.508	-30.066			9	-52.459	+57.019			9	-52.459	+57.019			9	-36.492	+47.090		
14	+46.532	-54.176	66 2682	9.2															

Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.		Diam.	<i>x</i>	<i>y</i>	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
28	-34° 749	+25° 562	65 2951	8° 7	9	-19° 527	+10° 800	65 2968	9° 6	10	-2° 298	+55° 353	65 2983	10° 0	26	+16° 942	+8° 397	65 2996	9° 2
10	-34° 704	+10° 377			10	-19° 216	+53° 089			9	-2° 262	+24° 767			10	+17° 194	+42° 847		
11	-34° 590	+30° 963			9	-19° 126	+48° 152			9	-1° 236	+42° 366			10	+17° 372	+27° 843		
9	-34° 586	+3° 172			15	-19° 030	+48° 968			9	-0° 903	+55° 185			9	+17° 400	+62° 545		
14	-33° 706	+30° 239			9	-18° 930	+58° 024			11	-0° 854	+23° 041			9	+17° 482	+53° 826		
11	-33° 682	+11° 536	65 2952	9° 4	9	-18° 818	+57° 950	65 2969	9° 6	10	-0° 784	+62° 867	65 2984	9° 4	9	+17° 694	+19° 604	65 2997	9° 9
10	-33° 545	+50° 885			11	-18° 679	+54° 323			14	-0° 224	+26° 743			10	+17° 971	+11° 197		
12	-33° 439	+28° 903			9	-18° 541	+39° 441			10	+0° 017	+26° 957			9	+18° 314	+46° 098		
11	-32° 532	+38° 472			10	-18° 048	+18° 422			11	+0° 639	+10° 220			9	+18° 384	+13° 619		
10	-32° 167	+3° 292			13	-17° 657	+10° 895			10	+0° 915	+11° 728			12	+18° 571	+31° 096		
	121					181					241				301				
9	-32° 026	+15° 617	65 2953	9° 2	9	-17° 580	+17° 630	65 2970	9° 6	9	+0° 918	+52° 410	65 2985	9° 4	9	+19° 013	+29° 404	65 2998	9° 8
19	-31° 863	+10° 483			18	-17° 355	+20° 173			9	+1° 140	+29° 444			11	+19° 030	+50° 983		
10	-31° 500	+10° 282			17	-16° 925	+16° 971			9	+1° 151	+14° 891			9	+19° 288	+23° 899		
24	-31° 339	+22° 131			9	-16° 876	+60° 850			9	+1° 242	+28° 193			14	+19° 920	+47° 329		
19	-31° 254	+50° 169			9	-16° 619	+10° 575			9	+1° 256	+4° 089			9	+20° 287	+40° 865		
18	-31° 124	+55° 787	64 3078	9° 4	9	-16° 578	+53° 023	64 3090	8° 2	9	+1° 300	+56° 162	65 2987	8° 6	11	+20° 289	+56° 129	65 2999	9° 4
12	-30° 994	+19° 801			10	-16° 321	+13° 309			11	+1° 465	+47° 618			13	+20° 663	+20° 135		
36	-30° 846	+13° 027			10	-15° 841	+36° 450			16	+1° 555	+11° 464			10	+20° 669	+45° 474		
32	-30° 763	+5° 693			12	-15° 741	+1° 667			9	+2° 381	+36° 343			10	+21° 109	+53° 206		
15	-30° 691	+4° 984			26	-15° 445	+60° 732			9	+2° 560	+52° 515			9	+21° 769	+38° 872		
	131					191					251				311				
9	-30° 301	+52° 221	65 2958	9° 4	18	-14° 781	+53° 395	65 2972	9° 6	17	+2° 567	+32° 526	65 2989	9° 8	9	+21° 842	+56° 111	65 3000	10° 0
10	-29° 712	+46° 902			18	-14° 682	+32° 413			11	+2° 958	+0° 980			9	+22° 737	+64° 907		
9	-29° 556	+59° 431			9	-13° 624	+63° 285			11	+2° 975	+17° 571			9	+23° 725	+49° 165		
19	-29° 213	+49° 874			9	-13° 298	+10° 764			28	+3° 137	+49° 987			10	+23° 825	+4° 798		
9	-28° 828	+31° 285			9	-12° 791	+1° 546			13	+3° 538	+6° 405			11	+24° 328	+16° 047		
19	-28° 331	+56° 833	64 3079	9° 0	10	-12° 621	+47° 642	65 2974	9° 2	11	+5° 305	+16° 092	65 2993	8° 6	9	+24° 880	+9° 941	65 3001	8° 3
14	-28° 286	+61° 579			10	-12° 567	+43° 637			10	+5° 771	+21° 029			14	+24° 889	+10° 794		
9	-28° 014	+22° 233			9	-11° 896	+18° 124			10	+5° 828	+64° 989			10	+25° 631	+47° 080		
13	-27° 888	+3° 336			11	-11° 180	+33° 999			9	+5° 860	+62° 940			10	+26° 748	+59° 028		
12	-27° 758	+59° 000			17	-10° 919	+24° 840			9	+6° 086	+55° 929			10	+26° 802	+44° 404		
	141					201					261				321				
22	-27° 632	+51° 395	65 2959	9° 3	10	-10° 768	+50° 065	65 2976	9° 9	13	+6° 335	+3° 777	65 2994	9° 6	9	+26° 954	+56° 370	65 3002	9° 2
9	-27° 374	+57° 803			9	-10° 495	+21° 882			14	+6° 563	+24° 227			16	+27° 455	+1° 666		
11	-26° 910	+40° 892			9	-9° 632	+40° 178			13	+6° 654	+28° 903			9	+27° 525	+51° 694		
18	-26° 724	+18° 539			9	-9° 406	+11° 410			20	+7° 019	+60° 071			11	+27° 742	+59° 683		
9	-26° 605	+41° 625			12	-9° 036	+53° 616			9	+7° 247	+20° 546			9	+27° 753	+0° 489		
27	-26° 515	+41° 221	65 2961	8° 7	13	-8° 691	+24° 492	65 2977	10° 0	9	+7° 421	+58° 084	65 2995	9° 2	20	+27° 799	+45° 483	65 3003	9° 9
11	-26° 245	+40° 381			9	-8° 460	+19° 333			10	+7° 915	+40° 722			9	+27° 871	+15° 043		
9	-26° 162	+47° 744			12	-8° 250	+18° 449			9	+8° 096	+56° 535			34	+27° 899	+24° 559		
9	-25° 379	+42° 571			9	-8° 134	+15° 811			25	+8° 200	+53° 234			9	+28° 060	+63° 855		
19	-25° 128	+0° 460			12	-8° 087	+24° 765			9	+8° 312	+64° 990			9	+28° 206	+55° 961		
	151					211					271				331				
11	-24° 926	+34° 854	65 2962	9° 4	11	-7° 982	+18° 327	65 2978	9° 6	12	+8° 357	+15° 508	65 2996	9° 2	20	+28° 323	+40° 502	65 3004	10° 0
10	-24° 879	+62° 982			18	-7° 739	+46° 899			9	+9° 449	+21° 000			9	+28° 596	+42° 137		
9	-24° 404	+57° 340			10	-7° 421	+14° 276			14	+9° 876	+3° 623			16	+28° 678	+1° 858		
9	-24° 330	+12° 479			9	-7° 340	+16° 527			10	+11° 695	+51° 479			12	+28° 687	+17° 274		
11	-23° 780	+48° 127			11	-7° 334	+52° 265			10	+11° 708	+47° 753			10	+29° 095	+13° 380		
10	-23° 318	+28° 090	65 2963	8° 8	9	-7° 266	+0° 866	65 2979	9° 4	9	+11° 921	+50° 990	65 2997	9° 2	14	+29° 529	+19° 067	65 3005	10° 0
14	-23° 316	+47° 023			9	-7° 039	+49° 592			10	+12° 766	+58° 269			13	+29° 655	+29° 898		
21	-23° 292	+13° 601			12	-6° 657	+40° 764			9	+12° 817	+64° 257			12	+30° 049	+12° 600		
9	-22° 222	+50° 731			9	-6° 473	+40° 692			9	+12° 905	+23° 081			13	+30° 118	+62° 411		
9	-22° 132	+50° 925			9	-5° 746	+15° 923			9	+12° 925	+61° 157			9	+30° 316	+63° 525		
	161					221					281				341				
15	-22° 123	+3° 976	65 2964	9° 8	12	-5° 517	+22° 316	65 2980	9° 7	9	+13° 139	+42° 121	65 2995	9° 2	10	+30° 577	+38° 898	65 3006	10° 0
12	-21° 845	+51° 769			22	-4° 589	+44° 681			9	+13° 165	+43° 513			13	+31° 004	+5° 355		
9	-21° 680	+18° 522			10	-4° 439	+51° 641			20	+13° 758	+11° 825			9	+31° 225	+44° 124		
9	-21° 173	+43° 144			9	-4° 414	+55° 761			10	+14° 340	+51° 768			12	+31° 360	+61° 205		
32	-20° 762	+8° 804			12	-3° 905	+25° 641			10	+14° 645	+39° 927			9	+31° 461	+44° 060		
9	-20° 626	+58° 990	65 2965	8° 6	9	-3° 593	+10° 728	65 2981	9° 4	9	+14° 675	+58° 502	65 2998	9° 2	9	+31° 595	+28° 991	65 3007	10° 0
9	-20° 389	+15° 592			13	-3° 502	+53° 085			9	+15° 028	+48° 247			10	+31° 876	+7° 989		
12	-20° 172	+8° 844			17	-3° 415	+51° 220			9	+15° 190	+33° 036			14	+32° 700	+8° 929		
38	-19° 687	+31° 480			12	-3° 245	+52° 043			9	+16° 173	+26° 348			11	+32° 504	+0° 942		
9	-19° 621	+58° 180			11	-2° 697	+31° 700			9	+16° 833	+32° 312			9	+33° 583	+46° 710		

15^h 0^m, - 66°

RECTANGULAR CO-ORDINATES.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
12	+33°671	+38°503			14	+49°338	+39°892			9	+64°141	+49°358			9	-48°920	-30°764		
12	+33°718	+44°096			9	+49°787	+45°926			9	+64°771	+49°139			9	-48°823	-8°693		
9	+33°726	+1°008			10	+50°863	+12°487			9	-64°801	-15°456			9	-48°460	-61°133		
11	+33°800	+5°759			10	+51°060	+18°046			10	-63°973	-30°356			13	-48°393	-45°875		
11	+33°884	+32°682			14	+51°126	+22°257			14	-63°628	-49°233	66 2681	9°4	9	-48°311	-10°480		
9	+33°931	+18°090			9	+51°893	+44°744			9	-62°378	-14°390			10	-48°008	-34°270		
10	+34°770	+29°289			9	+51°943	+38°292			20	-61°230	-54°320	66 2682	9°2	10	-47°712	-18°598		
10	+35°118	+15°807			10	+52°029	+28°041			9	-61°212	-27°213			9	-47°591	-15°868		
15	+35°476	+51°021			10	+52°050	+1°870			11	-61°203	-16°688			9	-47°143	-53°763		
9	+35°508	+53°074			10	+52°214	+49°254			9	-60°742	-18°684			9	-47°138	-14°212		
	381					421					481					541			
10	+36°330	+44°891			14	+52°253	+37°525			11	-60°570	-40°236			9	-47°070	-29°350		
11	+36°623	+34°208			42	+52°336	+16°014	65 3013	7°0	9	-60°561	-18°225			9	-47°059	-17°040		
10	+37°372	+41°625			12	+52°457	+41°914			17	-60°376	-42°674	66 2683	9°2	10	-47°017	-13°899		
28	+37°560	+8°725	65 3006	9°2	10	+52°503	+26°799			9	-59°521	-45°710			12	-45°146	-41°283		
9	+37°809	+7°165			9	+52°843	+7°210			9	-59°476	-11°691			9	-45°946	-15°416		
9	+38°072	+23°065			19	+52°941	+21°771	65 3014	9°6	9	-59°452	-49°626			10	-45°527	-52°687		
40	+38°131	+12°770	65 3007	8°2	10	+53°055	+10°664			14	-59°400	-3°324	65 2933	10°0	9	-45°438	-58°925		
9	+38°193	+6°589			10	+53°840	+19°450			9	-59°290	-45°348			10	-45°367	-2°547		
9	+38°630	+41°705			9	+55°412	+45°653			10	-58°953	-28°738			11	-45°120	-30°571		
9	+38°677	+14°180			10	+55°488	+7°910			9	-58°726	-48°288			9	-45°029	-48°933		
	371					431					491					551			
15	+38°960	+60°519			11	+55°496	+15°204			9	-58°558	-20°091			10	-44°910	-47°910		
24	+39°190	+63°711	64 3125	8°9	9	+56°174	+27°495			9	-58°304	-45°340			9	-44°873	-32°403		
9	+39°264	+63°657			16	+56°276	+46°937			9	-58°206	-2°564			10	-44°870	-29°411		
9	+39°518	+41°752			19	+56°358	+27°310	65 3015	9°5	15	-57°874	-40°190	66 2684	10°0	9	-44°534	-25°189		
12	+39°580	+40°764			17	+56°629	+35°510	65 3016	9°7	12	-57°558	-1°608			9	-44°074	-23°989		
9	+39°616	+7°078			18	+56°783	+35°010	65 3017	9°4	12	-57°171	-45°549			9	-43°896	-46°414		
10	+39°843	+11°424			11	+56°832	+31°230			11	-57°105	-28°936			13	-43°885	-9°589		
13	+39°964	+57°214			9	+57°123	+9°522			9	-56°327	-25°567			9	-43°727	-22°881		
32	+40°667	+20°729	65 3008	9°1	9	+57°433	+42°095			10	-56°048	-4°704			10	-43°332	-6°329		
10	+40°756	+40°819			19	+57°714	+27°231	65 3018	9°8	9	-55°884	-7°325			14	-43°214	-43°455		
	381					441					501					561			
9	+41°127	+29°836			9	+57°819	+47°399			10	-55°404	-32°315			24	-43°150	-43°587	66 2691	8°6
9	+41°353	+23°780			11	+58°033	+13°260			10	-55°222	-53°920			15	-43°129	-46°063	66 2690	9°4
9	+41°762	+22°345			9	+58°133	+17°928			9	-55°185	-12°080			9	-43°095	-45°635		
9	+42°019	+2°799			12	+58°247	+2°851			9	-55°022	-9°755			10	-42°934	-59°125		
9	+42°164	+17°483			17	+58°398	+7°460	65 3021	10°0	9	-54°670	-1°831			14	-42°879	-45°709	66 2692	10°0
12	+42°361	+6°705			12	+58°760	+24°627			9	-54°476	-12°977			9	-42°642	-46°379		
10	+42°632	+17°093			17	+58°768	+5°114	65 3022	9°9	9	-54°330	-13°361			12	-42°571	-20°925		
9	+42°649	+56°032			17	+59°122	+5°492	65 3024	9°9	9	-53°773	-25°076			9	-42°521	-37°992		
9	+42°706	+48°992			22	+59°139	+50°666	65 3019	9°9	9	-53°745	-47°754			13	-42°465	-50°619		
9	+43°139	+33°355			10	+59°218	+40°789			9	-53°379	-8°471			11	-42°196	-59°406		
	391					451					511					571			
13	+43°492	+13°847			9	+59°267	+46°412			14	-53°333	-41°641	66 2685	10°0	13	-42°088	-28°764		
9	+43°494	+42°648			9	+59°939	+11°248			9	-52°779	-54°642			12	-42°077	-23°673		
13	+44°802	+48°210			9	+59°958	+56°068			9	-52°776	-47°010			9	-41°619	-21°073		
12	+45°139	+49°502			11	+60°017	+29°660			12	-52°428	-48°112			9	-41°587	-21°875		
9	+45°212	+52°918			13	+60°528	+35°021			9	-51°835	-12°281			9	-41°027	-64°233		
20	+45°611	+46°276	65 3009	9°5	13	+60°824	+6°014			17	-51°827	-59°792	66 2686	9°2	15	-40°962	-61°279	66 2693	9°4
14	+46°026	+63°471	64 3130	9°9	9	+61°207	+52°214			13	-51°660	-17°223	66 2688	10°0	9	-40°558	-1°619		
14	+46°501	+38°418			36	+61°415	+45°281	65 3025	8°4	9	-51°522	-19°818			11	-40°433	-1°447		
10	+47°111	+47°126			10	+61°560	+0°019			9	-51°329	-30°572			9	-40°426	-31°315		
12	+47°296	+12°945			10	+61°563	+7°146			9	-51°225	-54°172			10	-40°330	-51°579		
	401					461					521					581			
9	+47°598	+7°328			10	+61°658	+1°073			9	-51°096	-18°916			13	-40°218	-54°365		
18	+47°953	+21°151	65 3010	9°9	10	+61°984	+24°301			9	-50°948	-30°140			14	-39°848	-30°208	66 2694	10°0
17	+48°092	+4°935	65 3011	9°8	22	+62°194	+19°618	65 3026	9°5	9	-50°661	-20°775			9	-39°710	-48°273		
10	+48°111	+18°812			11	+62°296	+27°051			13	-50°252	-59°030	66 2687	9°7	9	-39°448	-27°800		
9	+48°150	+10°141			14	+62°547	+5°521			9	-50°053	-22°151			9	-39°354	-28°640		
10	+48°408	+13°810			9	+63°044	+50°804			9	-50°023	-11°237			15	-39°340	-7°704	66 2695	9°4
9	+48°489	+29°847			9	+63°239	+42°375			9	-50°015	-28°788			9	-39°121	-45°751		
9	+48°696	+2°962			10	+63°583	+14°126			9	-49°613	-34°244			9	-38°836	-49°618		
12	+49°044	+7°607			9	+63°655	+36°397			15	-49°391	-0°550	65 2940	9°3	10	-38°728	-8°007		
9	+49°248	+21°315			10	+63°671	+12°694			12	-49°084	-54°659	66 2689	10°0	10	-38°436	-22°524		

RECTANGULAR CO-ORDINATES.

15^h 0^m, - 66°

RECTANGULAR CO-ORDINATES.																				15° 0' m. - 66°			
Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.					
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.				
	591					651					711					771							
16	-38°319	-13°420	66 2697	9°3	18	-27°097	-43°957	66 2704	9°3	16	-15°128	-39°745	66 2711	9°7	9	-2°186	-60°376						
16	-38°080	-22°864	66 2698	9°7	9	-27°022	-31°589			9	-15°125	-20°355			9	-2°103	-57°220						
14	-38°054	-35°272			10	-26°951	-37°549			10	-15°018	-44°610			9	-1°954	-36°999						
11	-37°779	-42°464			9	-26°573	-23°240			9	-14°183	-15°427			9	-1°927	-2°572						
14	-37°554	-45°199			9	-26°350	-43°985			9	-14°030	-29°687			9	-1°926	-63°071						
9	-37°541	-42°368			9	-26°185	-54°813			9	-13°963	-33°877			9	-1°768	-64°208						
14	-37°509	-62°893	66 2696	9°7	9	-26°076	-10°874			14	-13°505	-38°215	66 2712	10°0	10	-1°618	-35°061						
9	-37°386	-60°425			9	-25°705	-11°214			10	-13°377	-18°519			52	1°614	-5°402	65 2982	7°6				
13	-37°116	-31°875			14	-25°512	-48°713	66 2705	10°0	10	-13°041	-63°710			9	-1°392	-64°120						
11	-36°864	-4°379			10	-24°862	-31°437			9	-13°031	-31°667			10	-0°700	-24°190						
	601					661					721					781							
9	-36°600	-2°484			10	-24°850	-33°441			9	-13°019	-1°987			9	-0°525	-54°201						
13	-36°519	-28°652			9	-24°840	-44°410			15	-12°243	-0°914	65 2973	9°6	9	-0°223	-31°413						
50	-36°471	-55°930	66 2699	8°6	12	-24°815	-9°561			9	-12°216	-52°106			11	+0°088	-3°719						
9	-36°208	-1°418			9	-24°196	-17°653			10	-11°998	-2°866			9	+0°109	-26°179						
16	-35°930	-41°330			10	-24°180	-57°119			14	-11°899	-20°199	66 2713	9°9	15	+0°117	-26°590	66 2722	9°4				
9	-35°895	-60°490			16	-23°831	-7°728	66 2707	9°3	12	-11°728	-27°677			10	+0°142	-35°897						
12	-35°846	-56°492			10	-23°648	-61°408			10	-11°571	-55°692			36	+0°210	-13°008	66 2723	8°2				
12	-35°820	-52°766			9	-23°552	-50°499			9	-11°465	-35°973			9	+0°728	-12°298						
9	-35°786	-53°632			18	-23°476	-52°349	66 2706	9°4	9	-11°453	-20°964			9	+1°152	-56°688						
14	-35°550	-62°425	66 2700	9°6	13	-23°096	-45°656			9	-11°381	-15°857			10	+1°260	-52°174						
	611					671				9	-10°928	-23°320				791							
9	-35°480	-40°719			9	-22°993	-36°637			9	-10°928	-23°320			9	+1°286	-47°761						
10	-34°979	-14°398			12	-22°798	-41°974			15	-10°435	-5°108	65 2975	9°9	11	+1°404	-63°774						
10	-34°851	-13°804			9	-22°647	-36°010			9	-10°306	-32°217			10	+1°800	-53°419						
9	-34°357	-37°967			9	-22°226	-5°234			9	-10°039	-38°235			9	+2°174	-24°873						
9	-33°896	-41°384			9	-21°896	-31°677			9	-9°772	-22°709			13	+2°239	-30°253						
9	-33°638	-51°426			9	-21°534	-42°210			9	-9°498	-20°261			9	+2°354	-54°391						
10	-33°493	-64°755			9	-21°511	-35°763			16	-9°130	-64°864			22	+2°598	-56°144	66 2724	9°3				
10	-32°997	-42°437			13	-21°431	-51°348			9	-8°819	-38°229			24	+3°075	-5°075	65 2986	8°6				
10	-32°729	-29°294			9	-21°165	-21°762			9	-8°789	-37°369			9	+3°439	-47°495						
10	-32°689	-52°878			9	-20°379	-28°344			9	-8°253	-42°173			56	+3°622	-42°442	66 2725	7°6				
	621					681					741					801							
9	-32°501	-42°028			9	-20°172	-39°666			9	-8°179	-17°850			10	+3°806	-56°997						
9	-32°429	-44°735			15	-19°664	-52°923	66 2708	9°9	9	-8°004	-27°914			10	+3°941	-9°073						
10	-32°034	-54°881			34	-19°569	-27°048	66 2709	8°4	9	-7°683	-18°420			9	+4°090	-19°795						
12	-32°016	-31°767			10	-19°456	-20°995			11	-7°575	-46°807			9	+4°128	-46°670						
14	-31°828	-39°278			9	-19°226	-40°375			10	-7°563	-35°169			9	+4°371	-42°120						
12	-31°818	-30°181			9	-18°947	-44°172			9	-7°479	-10°493			16	+4°624	-5°087	65 2988	9°3				
10	-31°804	-18°050			12	-18°882	-49°681			24	-7°393	-40°840	66 2715	9°2	9	+4°650	-38°110						
9	-31°775	-17°647			11	-18°842	-59°201			10	-7°280	-40°785			9	+4°896	-57°942						
9	-30°389	-44°711			9	-18°580	-22°783			9	-7°199	-41°513			9	+5°205	-30°401						
9	-30°065	-44°134			9	-18°491	-55°308			9	-6°515	-42°020			10	+5°452	-36°263						
	631					691					751					811							
14	-30°012	-25°844			12	-18°361	-52°451			10	-6°329	-9°695			16	+6°034	-16°934	66 2726	9°3				
17	-29°983	-25°778	66 2702	8°8	10	-18°309	-43°976			9	-6°047	-25°924			9	+6°312	-33°819						
16	-29°823	-52°545	66 2701	9°3	10	-18°216	-64°491			9	-5°994	-37°051			10	+6°732	-61°385						
12	-29°806	-62°184			9	-18°206	-6°908			9	-5°875	-59°029			12	+6°784	-4°773	65 2991	9°9				
9	-29°715	-24°612			12	-17°801	-23°148			16	-5°693	-24°401	66 2716	9°4	9	+6°800	-36°201						
10	-29°697	-35°565			9	-17°372	-13°553			9	-5°520	-24°014			9	+6°833	-56°602						
9	-29°665	-64°662			9	-17°299	-49°775			9	-5°499	-36°018			9	+7°320	-42°606						
9	-29°563	-59°721			12	-17°286	-36°920			9	-4°421	-12°581			12	+7°522	-48°286						
11	-29°371	-14°984			12	-17°160	-51°604			9	-4°391	-17°175			13	+7°530	-37°950						
9	-29°368	-32°931			9	-17°131	-43°082			18	-4°219	-40°277	66 2717	9°6	15	+7°648	-20°447	66 2727	9°6				
	641					701					761					821							
9	-29°256	-30°201			9	-17°055	-32°136			10	-4°081	-33°239			9	+7°911	-38°629						
10	-28°558	-16°894			10	-16°882	-4°007			11	-3°959	-59°147			9	+7°938	-4°418						
9	-28°454	-63°744			9	-16°877	-39°179			11	-3°942	-47°556			19	+7°992	-52°750	66 2728	9°2				
9	-28°365	-22°165			10	-16°737	-30°349			14	-3°863	-13°924	66 2718	9°9	9	+8°074	-42°782						
9	-28°294	-41°517			10	-16°593	-52°716			13	-3°776	-37°835			9	+8°186	-13°871						
16	-28°274	-25°065	66 2703	9°3	11	-16°317	-33°239			9	-3°766	-3°312			10	+8°430	-57°299						
14	-27°891	-9°669			14	-16°271	-45°517			14	-3°484	-44°930	66 2719	10°0	9	+8°849	-6°685						
9	-27°676	-13°354			9	-16°211	-10°675			24	-3°439	-30°656	66 2720	8°9	9	+8°997	-3°135						
9	-27°361	-5°121			9	-15°689	-36°835			9	-2°433	-63°122			9	+9°008	-34°261						
9	-27°178	-42°893			13	-15°586	-24°908	66 2710	10°0	13	-2°191	-28°661			9	+9°541	-34°415						

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	831					891					951					1011			
9	+10° 900	-58° 378			10	+24° 447	-47° 276			13	+38° 127	-48° 899			9	+50° 304	-2° 019		
15	+10° 965	-7° 013	66 2729	9.5	9	+25° 110	-11° 550			12	+38° 658	-22° 223			11	+50° 354	-30° 286		
9	+11° 182	-25° 644			34	+25° 141	-60° 938	66 2737	8.5	14	+38° 801	-44° 060			9	+50° 581	-5° 797		
20	+11° 333	-43° 399	66 2730	9.2	17	+25° 367	-49° 417	66 2738	9.5	11	+39° 058	-46° 721			14	+50° 812	-4° 035	65 3012	9.4
26	+11° 564	-29° 919	66 2731	8.6	9	+25° 383	-44° 820			14	+39° 130	-0° 807			20	+51° 077	-13° 600	66 2745	9.2
9	+11° 592	-45° 697			11	+25° 417	-42° 376			9	+39° 160	-61° 146			9	+51° 196	-29° 602		
9	+11° 982	-33° 541			9	+25° 437	-49° 724			9	+39° 210	-38° 926			15	+51° 243	-24° 278		
16	+12° 116	-11° 130	66 2732	9.2	9	+25° 668	-54° 526			9	+39° 859	-2° 758			14	+51° 265	-35° 012		
9	+13° 149	-54° 151			9	+26° 148	-15° 860			10	+40° 140	-37° 753			10	+51° 451	-36° 219		
11	+13° 303	-61° 665			9	+26° 223	-40° 197			9	+40° 216	-6° 162			20	+51° 526	-14° 001	66 2746	9.2
	841					901					961					1021			
9	+13° 394	-4° 482			9	+26° 341	-36° 057			9	+40° 718	-62° 860			9	+51° 567	-23° 173		
9	+13° 900	-48° 421			9	+26° 895	-24° 027			13	+40° 889	-46° 350			9	+51° 930	-2° 947		
13	+14° 139	-40° 431			9	+27° 287	-40° 794			9	+40° 995	-53° 494			9	+52° 084	-37° 429		
11	+14° 177	-32° 323			9	+27° 427	-37° 828			9	+41° 030	-0° 643			9	+52° 188	-5° 631		
9	+14° 248	-46° 790			14	+27° 823	-49° 181			10	+41° 111	-34° 985			9	+52° 711	-50° 504		
9	+15° 054	-1° 791			9	+27° 899	-16° 476			11	+41° 184	-3° 861			9	+52° 875	-36° 037		
9	+16° 234	-44° 051			9	+28° 264	-30° 119			9	+41° 794	-34° 966			9	+52° 890	-15° 583		
9	+16° 283	-24° 729			9	+28° 287	-46° 297			13	+41° 839	-55° 990			9	+53° 482	-43° 187		
9	+17° 012	-31° 709			9	+28° 433	-37° 208			16	+41° 895	-21° 713	66 2742	9.7	20	+53° 485	-11° 263	66 2747	9.2
9	+17° 061	-55° 684			11	+28° 445	-3° 901			10	+42° 178	-18° 454			9	+53° 625	-20° 594		
	851					911					971					1031			
10	+17° 279	-38° 848			10	+28° 547	-1° 424			10	+42° 676	-37° 290			9	+53° 675	-35° 537		
9	+17° 290	-61° 336			9	+28° 904	-11° 511			14	+42° 942	-36° 229	66 2743	10.0	10	+53° 788	-25° 270		
15	+17° 757	-38° 996	66 2733	10.0	9	+28° 945	-40° 700			11	+42° 959	-42° 284			9	+54° 272	-8° 999		
9	+17° 892	-7° 097			9	+29° 463	-59° 791			10	+42° 997	-7° 283			9	+54° 606	-42° 972		
10	+18° 261	-55° 593			10	+29° 663	-31° 111			9	+43° 003	-60° 992			9	+54° 832	-26° 634		
9	+18° 481	-37° 358			9	+30° 383	-58° 003			9	+43° 019	-43° 772			9	+54° 938	-47° 009		
14	+18° 602	-18° 387			14	+30° 625	-59° 735	66 2739	10.0	11	+43° 178	-5° 467			9	+55° 276	-64° 041		
15	+18° 904	-45° 799			10	+30° 925	-46° 059			9	+43° 189	-58° 648			9	+55° 679	-33° 850		
9	+18° 004	-7° 575			9	+31° 138	-44° 404			11	+43° 246	-1° 196			14	+55° 780	-41° 540		
9	+18° 915	-6° 399			9	+31° 173	-49° 007			9	+43° 575	-61° 000			13	+56° 526	-51° 610		
	861					921					981					1041			
11	+19° 350	-24° 871			9	+31° 446	-29° 240			9	+43° 864	-42° 049			9	+57° 007	-26° 980		
9	+19° 506	-16° 238			11	+31° 687	-29° 530			11	+44° 028	-27° 527			9	+57° 193	-36° 568		
22	+19° 693	-45° 453	66 2734	9.2	11	+31° 819	-25° 082			9	+44° 167	-3° 187			26	+57° 531	-6° 645	65° 3020	8.4
9	+20° 366	-55° 286			11	+31° 973	-26° 628			11	+44° 179	-11° 122			10	+57° 880	-18° 041		
9	+20° 411	-30° 720			15	+32° 561	-47° 505			9	+44° 256	-53° 584			9	+58° 232	-23° 896		
11	+20° 804	-52° 039			10	+32° 583	-25° 498			15	+44° 522	-28° 691	66 2744	10.0	10	+58° 264	-45° 615		
13	+21° 093	-22° 285			10	+33° 269	-14° 720			11	+44° 773	-10° 024			12	+58° 605	-21° 704		
10	+21° 687	-23° 283			11	+33° 984	-46° 329			9	+44° 860	-8° 123			18	+58° 738	-1° 361	65 3023	9.2
9	+22° 230	-47° 260			10	+34° 111	-47° 382			11	+45° 021	-45° 724			9	+59° 363	-8° 226		
14	+22° 264	-54° 606			10	+34° 516	-26° 202			10	+45° 091	-33° 684			12	+59° 525	-13° 666		
	871					931					991					1051			
14	+22° 457	-36° 957			9	+34° 665	-19° 918			12	+45° 110	-30° 217			32	+59° 542	-40° 447	66 2748	8.8
14	+22° 468	-47° 807			11	+34° 705	-39° 583			9	+45° 400	-11° 509			12	+59° 629	-6° 834		
10	+22° 518	-31° 254			9	+34° 729	-57° 343			9	+45° 515	-3° 607			10	+60° 080	-18° 300		
9	+22° 600	-54° 197			17	+34° 827	-25° 868	66 2740	9.4	9	+45° 548	-38° 165			14	+60° 763	-29° 758		
20	+22° 704	-58° 646	66 2735	9.2	13	+34° 939	-58° 935			11	+46° 511	-9° 959			9	+61° 025	-47° 139		
11	+22° 972	-13° 812			9	+34° 961	-12° 508			9	+46° 834	-21° 761			10	+61° 364	-35° 755		
11	+23° 305	-50° 713			9	+35° 394	-21° 603			9	+47° 055	-53° 327			9	+61° 568	-0° 000		
16	+23° 406	-31° 252	66 2736	9.4	10	+35° 411	-22° 927			9	+47° 109	-31° 590			28	+61° 610	-45° 775	66 2750	8.9
9	+23° 616	-33° 875			9	+35° 793	-19° 710			9	+47° 175	-55° 758			10	+61° 658	-8° 626		
13	+23° 733	-38° 915			14	+35° 954	-40° 236			9	+47° 535	-53° 812			9	+61° 693	-11° 375		
	881					941					1001					1061			
9	+23° 750	-8° 509			14	+36° 138	-7° 399			9	+47° 570	-39° 027			9	+61° 796	-38° 406		
14	+23° 853	-43° 748			9	+36° 147	-10° 044			9	+48° 178	-57° 822			16	+61° 827	-10° 767	66 2749	9.2
13	+23° 854	-14° 022			9	+36° 536	-47° 522			9	+48° 376	-61° 726			13	+61° 848	-11° 609		
9	+23° 857	-56° 142			28	+36° 747	-31° 800	66 2741	8.8	11	+49° 048	-13° 828			10	+61° 955	-55° 943		
10	+23° 885	-25° 073			14	+37° 011	-42° 710			9	+49° 067	-26° 935			15	+62° 142	-61° 249	66 2751	9.9
11	+23° 994	-31° 514			9	+37° 320	-40° 704			11	+49° 619	-5° 865			9	+62° 823	-23° 178		
9	+23° 997	-36° 995			11	+37° 919	-17° 578			9	+49° 634	-11° 430			14	+63° 172	-0° 367	65 3027	9.9
14	+23° 999	-10° 410			9	+38° 008	-42° 000			9	+49° 733	-48° 914			11	+63° 699	-51° 588		
9	+24° 142	-62° 442			9	+38° 092	-9° 828			9	+49° 826	-29° 763			36	+63° 849	-51° 408	66 2752	8.4
14	+24° 443	-40° 730			13	+38° 106	-20° 899			15	+49° 849	-27° 577			9	+64° 091	-23° 334		

C.P.D.					C.P.D.					C.P.D.					C.P.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
PLATE CENTRE. 15 ^h 18 ^m , - 66°. Plate 1316. 1895, June 24. PROVISIONAL CONSTANTS. a = - '01133 d = + '00112 b = - '00098 e = - '01118 c = + '0105 f = - '0837 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51, 9 -51'735 +51'390 9 -50'981 +55'304 10 -50'936 +42'983 9 -50'913 +24'870 10 -50'800 +27'628 10 -50'777 +6'561 9 -50'526 +50'028 15 -50'361 +20'217 9 -50'121 +7'744 9 -50'110 +37'063 61 9 -49'896 +49'810 9 -49'612 +0'598 9 -49'598 +1'680 12 -49'010 +6'177 9 -48'599 +14'834 9 -48'578 +41'356 10 -48'405 +13'412 14 -47'973 +0'349 9 -47'860 +27'102 9 -47'716 +43'576 71 10 -47'651 +48'270 14 -46'865 +14'996 10 -46'862 +26'171 9 -46'252 +43'182 11 -46'188 +64'310 15 -45'810 +9'715 9 -45'522 +4'290 9 -45'200 +26'808 10 -45'133 +17'337 9 -44'937 +2'630 81 9 -44'561 +32'249 9 -44'124 +13'455 9 -43'754 +24'515 12 -43'724 +3'167 13 -43'369 +26'368 12 -43'288 +51'760 12 -43'151 +58'693 9 -42'906 +63'336 9 -42'300 +61'482 9 -42'123 +49'501 91 9 -41'792 +46'804 10 -40'989 +47'203 10 -40'871 +47'106 9 -40'813 +33'029 10 -40'569 +34'489 9 -40'335 +37'879 11 -40'168 +64'094 10 -39'075 +56'511 10 -38'354 +15'175 14 -37'683 +26'885 101 9 -37'478 +39'236 9 -37'439 +28'191 10 -37'434 +27'215 9 -37'330 +40'438 9 -37'278 +40'805 9 -37'192 +19'089 11 -37'064 +64'706 9 -36'946 +18'779 9 -36'751 +24'815 9 -36'542 +60'240					111, 18 -36'487 +3'332 9 -36'364 +14'168 14 -36'153 +29'837 9 -35'299 +21'777 10 -34'641 +13'424 10 -34'204 +41'873 12 -34'185 +62'892 9 -34'054 +45'294 10 -34'037 +45'848 9 -33'721 +40'857 121 9 -33'670 +11'523 13 -33'169 +39'569 9 -32'762 +35'806 9 -32'149 +14'622 9 -31'931 +55'103 9 -31'773 +19'185 10 -31'753 +61'006 9 -31'207 +55'008 9 -30'297 +0'066 10 -30'046 +13'138 131 14 -29'542 +50'654 11 -29'537 +46'141 9 -29'281 +1'842 9 -29'147 +32'445 20 -28'253 +16'807 9 -28'197 +2'122 19 -27'458 +56'499 15 -27'280 +13'794 44 -27'211 +9'025 11 -27'100 +52'301 141 11 -25'956 +40'430 9 -25'227 +33'531 11 -24'861 +30'378 9 -24'669 +22'298 9 -24'206 +5'190 11 -24'140 +54'901 11 -23'698 +62'934 12 -23'614 +22'532 11 -23'311 +40'536 12 -23'052 +13'891 151 9 -23'034 +38'378 9 -22'952 +23'758 9 -22'685 +12'495 9 -22'582 +29'766 10 -22'016 +5'782 12 -21'700 +64'062 10 -21'272 +56'351 10 -21'046 +61'685 9 -20'720 +12'797 13 -20'420 +30'185 161 18 -20'403 +7'438 9 -20'360 +13'157 9 -20'138 +21'218 12 -19'778 +30'678 17 -19'456 +61'662 9 -19'283 +25'168 9 -19'164 +23'629 9 -19'119 +54'703 11 -18'818 +31'933 9 -17'926 +20'638					171, 10 -17'232 +44'717 10 -16'879 +29'257 12 -16'674 +0'317 10 -16'117 +4'293 9 -15'991 +23'796 18 -15'961 +44'557 11 -15'930 +49'285 9 -15'920 +40'674 11 -15'826 +21'290 9 -15'820 +51'366 181 9 -15'770 +37'363 9 -15'738 +53'454 10 -15'607 +25'047 12 -15'597 +12'002 10 -15'473 +60'620 15 -15'181 +48'386 14 -14'204 +58'623 10 -13'805 +56'377 9 -13'520 +54'317 24 -13'507 +29'484 191 14 -13'240 +29'498 9 -13'213 +1'000 9 -13'010 +11'480 9 -12'977 +46'656 9 -12'945 +41'448 9 -12'871 +29'802 11 -12'549 +56'057 11 -12'308 +7'846 10 -12'052 +19'842 10 -11'654 +12'604 201 12 -11'551 +34'175 9 -11'479 +42'751 10 -11'376 +21'857 11 -11'072 +59'339 11 -10'897 +47'683 9 -10'867 +42'658 10 -10'467 +59'137 10 -10'431 +50'100 9 -9'777 +53'503 15 -9'067 +63'434 211 14 -8'994 +19'331 25 -8'789 +19'417 19 -8'699 +61'981 9 -8'382 +24'575 9 -7'912 +21'180 9 -7'591 +62'565 10 -7'180 +46'740 9 -6'823 +33'911 11 -6'740 +15'211 9 -6'101 +56'933 221 9 -6'069 +63'714 9 -5'968 +60'576 23 -5'951 +48'454 9 -5'931 +40'108 9 -5'544 +45'306 12 -5'514 +18'168 11 -5'439 +52'816 12 -5'124 +46'354 9 -4'924 +6'371 18 -4'687 +2'440																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
II	-64'750	+12'499	65 3010	9'9	II	-64'750	+12'499	65 3011	9'8	II	-64'750	+12'499	65 3013	7'0	II	-64'750	+12'499	65 3015	9'5	II	-64'750	+12'499	65 3017	9'4	II	-64'750	+12'499	65 3019	9'9	II	-64'750	+12'499	65 3021	10'0	II	-64'750	+12'499	65 3023	8'4	II	-64'750	+12'499	65 3025	9'9	II	-64'750	+12'499	65 3027	9'9	II	-64'750	+12'499	65 3029	9'8	II	-64'750	+12'499	65 3031	9'9	II	-64'750	+12'499	65 3033	9'7	II	-64'750	+12'499	65 3035	9'6	II	-64'750	+12'499	65 3037	9'2	II	-64'750	+12'499	65 3039	9'9	II	-64'750	+12'499	65 3041	9'2	II	-64'750	+12'499	65 3043	9'0	II	-64'750	+12'499	65 3045	9'7	II	-64'750	+12'499	65 3047	9'6	II	-64'750	+12'499	65 3049	9'4	II	-64'750	+12'499	65 3051	9'2	II	-64'750	+12'499	65 3053	9'0	II	-64'750	+12'499	65 3055	9'8	II	-64'750	+12'499	65 3057	9'5	II	-64'750	+12'499	65 3059	9'2	II	-64'750	+12'499	65 3061	9'8	II	-64'750	+12'499	65 3063	9'5	II	-64'750	+12'499	65 3065	9'4	II	-64'750	+12'499	65 3067	9'5	II	-64'750	+12'499	65 3069	9'2	II	-64'750	+12'499	65 3071	9'8	II	-64'750	+12'499	65 3073	9'5	II	-64'750	+12'499	65 3075	9'4	II	-64'750	+12'499	65 3077	9'9	II	-64'750	+12'499	65 3079	9'8	II	-64'750	+12'499	65 3081	9'5	II	-64'750	+12'499	65 3083	9'4	II	-64'750	+12'499	65 3085	9'5	II	-64'750	+12'499	65 3087	9'2	II	-64'750	+12'499	65 3089	9'8	II	-64'750	+12'499	65 3091	9'5	II	-64'750	+12'499	65 3093	9'2	II	-64'750	+12'499	65 3095	9'8	II	-64'750	+12'499	65 3097	9'5	II	-64'750	+12'499	65 3099	9'2	II	-64'750	+12'499	65 3101	9'8	II	-64'750	+12'499	65 3103	9'5	II	-64'750	+12'499	65 3105	9'2	II	-64'750	+12'499	65 3107	9'8	II	-64'750	+12'499	65 3109	9'5	II	-64'750	+12'499	65 3111	9'2	II	-64'750	+12'499	65 3113	9'8	II	-64'750	+12'499	65 3115	9'5	II	-64'750	+12'499	65 3117	9'2	II	-64'750	+12'499	65 3119	9'8	II	-64'750	+12'499	65 3121	9'5	II	-64'750	+12'499	65 3123	9'2	II	-64'750	+12'499	65 3125	9'8	II	-64'750	+12'499	65 3127	9'5	II	-64'750	+12'499	65 3129	9'2	II	-64'750	+12'499	65 3131	9'8	II	-64'750	+12'499	65 3133	9'5	II	-64'750	+12'499	65 3135	9'2	II	-64'750	+12'499	65 3137	9'8	II	-64'750	+12'499	65 3139	9'5	II	-64'750	+12'499	65 3141	9'2	II	-64'750	+12'499	65 3143	9'8	II	-64'750	+12'499	65 3145	9'5	II	-64'750	+12'499	65 3147	9'2	II	-64'750	+12'499	65 3149	9'8	II	-64'750	+12'499	65 3151	9'5	II	-64'750	+12'499	65 3153	9'2	II	-64'750	+12'499	65 3155	9'8	II	-64'750	+12'499	65 3157	9'5	II	-64'750	+12'499	65 3159	9'2	II	-64'750	+12'499	65 3161	9'8	II	-64'750	+12'499	65 3163	9'5	II	-64'750	+12'499	65 3165	9'2	II	-64'750	+12'499	65 3167	9'8	II	-64'750	+12'499	65 3169	9'5	II	-64'750	+12'499	65 3171	9'2	II	-64'750	+12'499	65 3173	9'8	II	-64'750	+12'499	65 3175	9'5	II	-64'750	+12'499	65 3177	9'2	II	-64'750	+12'499	65 3179	9'8	II	-64'750	+12'499	65 3181	9'5	II	-64'750	+12'499	65 3183	9'2	II	-64'750	+12'499	65 3185	9'8	II	-64'750	+12'499	65 3187	9'5	II	-64'750	+12'499	65 3189	9'2	II	-64'750	+12'499	65 3191	9'8	II	-64'750	+12'499	65 3193	9'5	II	-64'750	+12'499	65 3195	9'2	II	-64'750	+12'499	65 3197	9'8	II	-64'750	+12'499	65 3199	9'5	II	-64'750	+12'499	65 3201	9'2	II	-64'750	+12'499	65 3203	9'8	II	-64'750	+12'499	65 3205	9'5	II	-64'750	+12'499	65 3207	9'2	II	-64'750	+12'499	65 3209	9'8	II	-64'750	+12'499	65 3211	9'5	II	-64'750	+12'499	65 3213	9'2	II	-64'750	+12'499	65 3215	9'8	II	-64'750	+12'499	65 3217	9'5	II	-64'750	+12'499	65 3219	9'2	II	-64'750	+12'499	65 3221	9'8	II	-64'750	+12'499	65 3223	9'5	II	-64'750	+12'499	65 3225	9'2	II	-64'750	+12'499	65 3227	9'8	II	-64'750	+12'499	65 3229	9'5	II	-64'750	+12'499	65 3231	9'2	II	-64'750	+12'499	65 3233	9'8	II	-64'750	+12'499	65 3235	9'5	II	-64'750	+12'499	65 3237	9'2	II	-64'750	+12'499	65 3239	9'8	II	-64'750	+12'499	65 3241	9'5	II	-64'750	+12'499	65 3243	9'2	II	-64'750	+12'499	65 3245	9'8	II	-64'750	+12'499	65 3247	9'5	II	-64'750	+12'499	65 3249	9'2	II	-64'750	+12'499	65 3251	9'8	II	-64'750	+12'499	65 3253	9'5	II	-64'750	+12'499	65 3255	9'2	II	-64'750	+12'499	65 3257	9'8	II	-64'750	+12'499	65 3259	9'5	II	-64'750	+12'499	65 3261	9'2	II	-64'750	+12'499	65 3263	9'8	II	-64'750	+12'499	65 3265	9'5	II	-64'750	+12'499	65 3267	9'2	II	-64'750	+12'499	65 3269	9'8	II	-64'750	+12'499	65 3271	9'5	II	-64'750	+12'499	65 3273	9'2	II	-64'750	+12'499	65 3275	9'8	II	-64'750	+12'499	65 3277	9'5	II	-64'750	+12'499	65 3279	9'2	II	-64'750	+12'499	65 3281	9'8	II	-64'750	+12'499	65 3283	9'5	II	-64'750	+12'499	65 3285	9'2	II	-64'750	+12'499	65 3287	9'8	II	-64'750	+12'499	65 3289	9'5	II	-64'750	+12'499	65 3291	9'2	II	-64'750	+12'499	65 3293	9'8	II	-64'750	+12'499	65 3295	9'5	II	-64'750	+12'499	65 3297	9'2	II	-64'750	+12'499	65 3299	9'8	II	-64'750	+12'499	65 3301	9'5	II	-64'750	+12'499	65 3303	9'2	II	-64'750	+12'499	65 3305	9'8	II	-64'750	+12'499	65 3307	9'5	II	-64'750	+12'499	65 3309	9'2	II	-64'750	+12'499	65 3311	9'8	II	-64'750	+12'499	65 3313	9'5	II	-64'750	+12'499	65 3315	9'2	II	-64'750	+12'499	65 3317	9'8	II	-64'750	+12'499	65 3319	9'5	II	-64'750	+12'499	65 3321	9'2	II	-64'750	+12'499	65 3323	9'8	II	-64'750	+12'499	65 3325	9'5	II	-64'750	+12'499	65 3327	9'2	II	-64'750	+12'499	65 3329	9'8	II	-64'750	+12'499	65 3331	9'5	II	-64'750	+12'499	65 3333	9'2	II	-64'750	+12'499	65

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231					291					351					411			
20	- 4'519	+38'878	65 3055	9'2	14	+13'409	+44'493			11	+28'370	+32'709			13	+42'137	+31'309		
22	- 4'271	+61'225	64 3174	8'9	11	+13'482	+25'075			13	+29'005	+40'398			10	+42'247	+16'742		
24	- 4'269	+61'016	64 3173	8'8	12	+13'487	+17'988			10	+29'100	+27'433			9	+42'642	+47'192		
10	- 4'245	+60'321			14	+14'043	+ 8'352			16	+29'173	+ 4'588	65 3080	9'7	12	+42'890	+20'567		
14	- 3'776	+41'213	65 3056	10'0	17	+14'256	+51'649	65 3068	9'5	9	+29'354	+36'876			12	+43'559	+ 8'099	65 3089	10'0
9	- 3'252	+22'655			32	+14'456	+27'911	65 3069	8'8	9	+29'438	+48'181			9	+43'561	+55'227		
10	- 3'111	+62'549			9	+14'581	+41'863			11	+29'619	+17'289			12	+43'687	+ 3'257		
11	- 2'439	+49'964			9	+14'627	+56'726			15	+30'276	+52'532	65 3081	9'4	9	+44'216	+42'118		
9	- 1'930	+39'132			10	+14'667	+21'223			9	+30'789	+49'953			10	+44'454	+18'069		
9	- 1'919	+24'169			14	+14'745	+48'849			11	+31'045	+26'069			13	+44'595	+32'588		
	241					301					361					421			
13	- 1'646	+47'216			9	+14'922	+ 8'639			13	+31'328	+38'581			9	+44'757	+21'088		
11	- 0'694	+28'019			9	+16'310	+35'820			12	+31'589	+47'999			11	+44'813	+26'687	65 3090	10'0
24	- 0'675	+24'009	65 3057	8'8	9	+17'002	+56'888			10	+31'627	+14'978			13	+44'848	+26'485		
14	- 0'646	+54'931			9	+17'583	+22'768			10	+31'693	+12'524			9	+45'480	+43'054		
9	- 0'291	+10'094			10	+17'702	+41'603			9	+32'316	+30'116			9	+45'577	+48'816		
10	+ 0'128	+ 6'677			14	+18'220	+41'271	65 3070	9'9	10	+32'472	+20'167			17	+45'591	+ 2'328	65 3091	9'5
9	+ 0'338	+37'422			9	+18'606	+57'358			9	+32'816	+56'401			10	+46'434	+36'038		
10	+ 0'748	+ 5'745			10	+18'716	+42'899			9	+32'904	+27'623			15	+46'617	+33'072	65 3092	9'8
9	+ 1'166	+56'959			11	+18'801	+11'059			13	+32'907	+62'155	64 3200	10'0	11	+46'632	+ 7'373		
9	+ 1'421	+17'779			9	+18'857	+ 8'403			17	+32'916	+49'818	65 3082	9'9	9	+47'110	+33'582		
	251					311					371					431			
10	+ 1'653	+40'372			9	+19'423	+16'591			9	+33'064	+63'829			9	+47'221	+14'092		
11	+ 1'670	+39'305			9	+19'760	+44'715			10	+33'159	+48'468			10	+47'471	+44'188		
15	+ 1'820	+25'306	65 3058	9'7	14	+19'761	+40'924			9	+33'239	+27'748			9	+47'477	+43'618		
9	+ 2'059	+15'168			9	+20'959	+26'077			9	+33'546	+40'966			10	+47'543	+32'655		
13	+ 2'297	+29'911			11	+20'976	+22'512			14	+33'786	+ 6'711			9	+47'682	+ 6'503		
10	+ 2'768	+ 9'533			9	+21'125	+53'043			9	+33'953	+44'680			15	+47'724	+20'187		
40	+ 2'897	+14'126	65 3059	6'9	9	+21'514	+64'503			9	+34'331	+12'832			9	+47'976	+41'821		
22	+ 3'615	+52'140	65 3060	8'8	11	+21'533	+53'260			9	+34'666	+62'234			10	+47'983	+ 7'393		
9	+ 3'640	+56'397			9	+21'627	+ 8'507			18	+35'061	+26'592	65 3083	9'2	10	+48'267	+12'495		
10	+ 4'044	+62'631			11	+21'675	+58'866			9	+35'876	+23'255			24	+48'540	+58'862	64 3204	8'3
	261					321					381					441			
9	+ 4'380	+54'587			10	+21'692	+39'249			18	+35'967	+11'914	65 3084	9'0	9	+48'574	+ 6'941		
15	+ 4'576	+27'487	65 3061	9'9	23	+21'735	+51'368	65 3071	9'0	10	+36'155	+10'712			9	+48'732	+18'589		
10	+ 4'606	+60'641			11	+22'316	+63'853			10	+36'330	+37'278			14	+48'762	+52'904	65 3094	9'6
11	+ 5'017	+18'364			14	+22'488	+31'728			9	+36'608	+56'265			9	+48'926	+ 0'385		
10	+ 5'150	+ 4'607			20	+22'594	+13'166	65 3073	9'4	9	+36'763	+10'522			9	+48'940	+ 4'085		
10	+ 5'529	+46'932			10	+22'721	+22'259			11	+36'842	+21'866			9	+48'975	+ 4'176		
10	+ 5'567	+49'788			9	+22'920	+27'683			9	+37'121	+38'223			10	+49'257	+42'424		
11	+ 5'604	+53'969			13	+23'420	+37'388			9	+37'346	+28'991			13	+49'326	+63'566		
18	+ 5'714	+49'900	65 3063	9'4	10	+24'159	+47'792			9	+37'458	+48'136			9	+49'715	+28'114		
9	+ 5'761	+20'785			11	+24'238	+25'351			11	+37'480	+ 3'862			9	+49'724	+ 4'263		
	271					331					391					451			
9	+ 6'344	+46'462			9	+24'409	+22'297			9	+37'542	+32'638			12	+49'968	+ 9'941		
12	+ 6'634	+59'853			13	+24'437	+57'865			9	+37'551	+21'625			9	+50'061	+ 4'439		
9	+ 6'670	+60'989			29	+24'757	+45'200	65 3074	8'2	9	+37'713	+31'727			14	+50'128	+44'118	65 3095	10'0
9	+ 7'053	+25'389			9	+25'437	+29'669			9	+38'469	+31'201			9	+50'170	+53'102		
11	+ 7'556	+63'905			13	+25'463	+15'504	65 3075	9'8	12	+38'539	+ 6'642			9	+50'513	+ 6'324		
11	+ 7'570	+63'466			9	+25'934	+13'674			21	+38'883	+24'209	65 3086	9'4	21	+50'541	+21'071	65 3096	9'1
10	+ 7'821	+56'071			9	+26'375	+38'870			11	+39'220	+19'859			12	+51'170	+19'455		
10	+ 8'026	+28'062			9	+26'504	+ 5'279			12	+39'242	+46'909			9	+51'278	+22'982		
11	+ 9'130	+62'736			9	+26'509	+1'201			12	+39'450	+59'585			9	+51'333	+58'040		
21	+ 9'518	+ 7'495	65 3064	9'4	11	+26'563	+64'725			14	+39'450	+50'112	65 3087	9'8	26	+51'430	+ 4'425	65 3097	7'9
	281					341					401					461			
11	+ 9'592	+10'929			40	+26'834	+24'222	65 3076	7'0	9	+39'736	+64'976			9	+51'460	+41'084		
10	+ 9'651	+37'212			9	+26'838	+62'908			10	+39'855	+38'522			10	+51'526	+26'526		
11	+ 9'810	+ 2'070			9	+26'854	+14'932			25	+40'203	+ 9'720	65 3088	8'5	9	+51'615	+15'520		
13	+ 9'915	+16'228	65 3065	10'0	22	+27'369	+ 1'465	65 3078	9'4	9	+40'322	+43'496			9	+52'318	+51'136		
9	+10'405	+ 7'747			33	+27'499	+48'640	65 3077	7'6	9	+40'354	+10'572			9	+52'950	+ 0'143		
10	+10'703	+43'396			9	+27'631	+ 0'320			12	+40'871	+53'324			9	+53'049	+52'259		
9	+11'428	+60'629			10	+27'836	+62'481			24	+41'215	+58'826	64 3202	8'7	9	+53'081	+12'979		
13	+11'691	+56'796	64 3185	9'8	9	+28'099	+19'805			13	+41'261	+30'298			15	+53'441	+33'618		
9	+12'411	+35'346			9	+28'229	+23'724			9	+41'898	+54'610			9	+53'562	+50'968		
15	+12'631	+47'113	65 3066	9'8	9	+28'272	+ 8'193			10	+41'944	+ 1'925			10	+53'749	+ 6'034		

RECTANGULAR CO-ORDINATES.

15^h 18^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471,					531,					591,					651,			
9	+54°093	+48°447	65 3098	9°4	9	-55°894	-4°817	65 3020	8°4	12	-35°726	-4°394	66 2761	10°0	9	-17°754	-7°278	66 2771	8°9
19	+54°226	+1°519			9	-55°563	-25°154			10	-35°712	-35°646			9	-17°562	-19°851		
9	+54°262	+18°058			9	-54°952	-35°402			9	-35°659	-60°171			9	-17°333	-16°711		
12	+55°190	+27°450			9	-54°870	-50°387			9	-35°502	-5°480			26	-16°966	-16°334		
10	+55°224	+34°918			9	-54°596	-43°033			11	-35°347	-20°174			25	-16°854	-3°133		
11	+55°320	+33°341	65 3099	9°6	9	-53°503	-42°759	65 3023	9°2	9	-35°312	-22°089	66 2762	10°0	9	-16°744	-58°727	66 2772	8°8
9	+55°490	+6°917			24	-53°152	-6°319			9	-35°311	-59°310			11	-15°953	-48°936		
9	+55°782	+7°936			11	-52°443	-41°228			9	-35°081	-40°905			11	-15°525	-16°665		
11	+56°198	+26°971			19	-52°322	-0°951			9	-34°971	-0°168			13	-14°509	-39°857		
10	+56°963	+3°859			9	-52°253	-26°630			10	-34°787	-35°480			10	-13°834	-34°801		
	481					541					601					661			
10	+57°156	+2°789	65 3099	9°6	9	-52°002	-17°652	66 2748	8°8	13	-34°583	-28°036	66 2763	9°1	9	-13°809	-37°644	66 2773	10°0
9	+57°618	+2°286			11	-51°667	-14°330			9	-34°009	-31°600			11	-13°550	-30°484		
10	+57°656	+48°375			9	-51°357	-36°188			9	-33°699	-8°738			24	-13°465	-38°749		
10	+57°895	+12°382			9	-51°215	-7°747			10	-32°378	-2°428			9	-13°327	-4°403		
18	+57°969	+24°737			10	-51°049	-6°353			10	-32°175	-25°190			9	-13°247	-60°016		
11	+58°134	+44°479	65 3102	6°2	10	-51°015	-21°253	66 2749	9°2	13	-31°464	-35°545	66 2764	8°5	9	-12°951	-53°158	66 2774	9°7
13	+58°402	+46°161			10	-50°987	-51°216			9	-31°434	-55°159			10	-12°774	-46°969		
9	+58°582	+1°069			9	-49°804	-17°738			14	-31°290	-4°584			9	-12°509	-19°534		
48	+59°040	+0°071			12	-49°662	-45°129			10	-30°960	-4°435			9	-12°311	-50°193		
40	+59°058	+42°874			9	-48°886	-7°997			9	-30°765	-40°604			12	-12°281	-58°768		
	491					551					611					671			
9	+59°280	+58°767	65 3100	7°2	24	-48°750	-39°890	66 2750	8°9	9	-30°463	-61°715	66 2765	8°8	9	-12°037	-62°446	66 2775	8°9
11	+60°263	+42°621			17	-48°580	-10°128			9	-29°739	-5°289			13	-11°512	-11°619		
9	+60°272	+2°941			10	-48°498	-10°956			18	-29°472	-62°978			9	-11°357	-51°474		
9	+60°531	+11°232			11	-48°294	-29°137			9	-29°427	-36°644			9	-10°874	-13°844		
12	+60°615	+9°968			9	-47°283	-35°070			9	-28°712	-3°174			9	-10°389	-59°488		
9	+60°636	+33°200	65 3103	9°4	9	-46°720	-22°414	66 2751	9°9	9	-28°512	-63°201	66 2766	9°2	14	-10°271	-51°231	66 2776	9°4
9	+61°358	+15°098			24	-46°319	-45°045			10	-28°426	-27°370			9	-9°666	-24°805		
11	+61°453	+9°626			11	-45°361	-8°381			9	-28°237	-35°061			9	-9°599	-57°926		
10	+61°729	+7°094			10	-45°270	-55°145			9	-27°914	-46°505			9	-8°026	-30°661		
10	+62°229	+5°492			14	-44°708	-60°435			32	-27°903	-14°494			9	-7°382	-43°105		
	501					561					621					681			
14	+62°416	+64°279	65 3104	10°0	9	-44°269	-0°869	66 2753	8°0	9	-27°896	-43°817	66 2767	8°8	9	-7°251	-50°549	66 2777	9°9
17	+62°529	+28°156			34	-44°103	-8°334			10	-27°145	-51°885			15	-7°186	-30°969		
14	+62°605	+60°770			12	-43°845	-50°679			9	-26°850	-47°545			9	-6°693	-36°097		
18	+62°761	+17°750			9	-43°719	-29°374			10	-26°761	-51°385			10	-6°560	-41°340		
9	+63°329	+28°957			24	-43°681	-50°513			9	-26°224	-27°060			18	-6°523	-3°622		
9	+63°732	+23°945	66 2744	10°0	9	-43°249	-38°282	66 2754	8°9	9	-26°186	-37°587	66 2768	9°1	9	-6°443	-52°769	66 2778	9°9
12	+63°875	+6°466			20	-42°471	-11°830			9	-25°871	-50°153			9	-6°038	-6°443		
9	+64°115	+6°906			9	-42°376	-10°328			11	-25°647	-3°518			13	-5°820	-46°175		
9	+64°183	+5°921			10	-42°347	-24°457			9	-25°628	-26°773			10	-5°552	-2°020		
14	+64°488	+4°592			9	-41°962	-34°720			9	-25°018	-64°118			10	-4°732	-1°669		
	511					571					631					691			
12	+64°499	+33°357	66 2745	9°2	20	-41°704	-47°636	66 2755	8°9	10	-24°953	-45°121	66 2769	9°2	11	-4°492	-57°245	66 2779	9°9
12	-64°557	-29°235			9	-41°128	-10°794			18	-24°634	-60°298			9	-4°337	-51°513		
10	-63°906	-10°407			14	-41°028	-10°842			9	-23°759	-19°357			9	-4°240	-40°294		
11	-63°861	-30°707			9	-40°968	-40°376			10	-23°632	-48°144			15	-4°200	-63°064		
9	-63°647	-34°171			9	-40°776	-10°714			10	-23°304	-6°082			10	-4°041	-18°595		
9	-62°862	-46°186	65 3012	9°4	9	-40°656	-29°254	66 2756	9°6	18	-23°111	-42°302	66 2770	9°7	9	-3°776	-44°693	66 2780	9°9
10	-61°116	-6°093			9	-39°859	-19°472			9	-23°097	-48°709			14	-3°764	-18°897		
10	-61°094	-14°090			9	-39°830	-48°471			9	-22°860	-7°556			9	-3°193	-52°764		
12	-60°046	-4°172			19	-39°458	-15°533			9	-22°652	-28°715			10	-2°911	-22°809		
12	-59°329	-27°740			10	-39°252	-9°292			22	-22°569	-58°245			9	-2°243	-26°740		
	521					581					641					701			
16	-59°103	-13°726	66 2746	9°2	9	-38°882	-36°542	66 2757	9°2	9	-22°177	-35°280	66 2771	9°7	9	-2°052	-32°083	66 2781	9°9
10	-58°634	-30°407			9	-38°462	-31°866			20	-21°139	-59°051			9	-1°870	-55°615		
16	-58°627	-14°081			15	-37°264	-8°545			9	-20°964	-32°768			9	-1°689	-24°591		
12	-58°170	-24°345			15	-37°249	-64°709			9	-20°883	-5°466			11	-1°290	-58°247		
9	-57°926	-23°223			10	-36°996	-31°525			16	-20°424	-21°062			9	-0°711	-54°351		
12	-57°394	-35°050	66 2747	9°2	9	-36°697	-14°158	66 2758	9°4	19	-20°177	-55°749	66 2772	9°2	10	-0°531	-53°085	66 2782	9°9
9	-57°124	-36°242			9	-36°601	-44°269			9	-19°345	-13°643			12	-0°380	-37°882		
15	-56°873	-11°204			9	-36°273	-35°955			25	-19°218	-5°166			9	-0°311	-13°502		
9	-56°408	-37°399			13	-36°249	-43°077			12	-18°527	-49°868			9	+0°190	-53°231		
9	-56°066	-20°510			14	-35°877	-34°275			9	-17°883	-42°088			9	+0°450	-59°518		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	711,					771,					831,					891,			
9	+ 1'358	-13'884			9	+22'942	-34'854			9	+39'499	-15'638			12	+56'317	-61'545		
10	+ 1'596	-35'149			9	+23'818	- 9'279			10	+39'601	-36'953			26	+56'749	-13'801	66 2796	8'8
10	+ 1'739	- 7'392			9	+24'074	-63'039			9	+39'643	-24'430			15	+57'017	-59'336	66 2799	9'3
9	+ 1'746	-47'018			9	+24'651	-37'713			10	+39'744	-27'440			9	+57'146	-16'869		
10	+ 2'096	-17'002			11	+25'104	-48'555			10	+40'089	-56'418			11	+57'302	-23'760		
9	+ 2'274	-50'517			10	+25'408	-28'678			9	+40'104	-52'264			9	+58'078	-29'712		
9	+ 2'278	-52'247			9	+25'603	- 9'809			9	+40'454	-40'430			20	+58'162	- 1'009	65 3101	8'9
9	+ 2'347	-34'206			10	+25'736	-11'054			9	+40'975	-10'765			26	+58'223	-13'964	66 2798	8'6
9	+ 3'937	-22'339			10	+26'061	-64'022			18	+40'981	-12'130	66 2791	9'4	9	+58'229	-33'947		
9	+ 4'923	- 7'795			9	+26'084	-23'269			24	+41'127	-36'575	66 2792	8'6	9	+58'514	- 9'240		
	721					781					841					901			
11	+ 5'116	-57'967			9	+26'241	-44'744			14	+41'978	-27'284			9	+58'565	-33'094		
9	+ 5'360	-54'449			9	+26'417	-38'633			12	+42'006	-21'895			9	+59'581	-58'145		
22	+ 5'491	- 4'423	65 3062	9'2	9	+26'563	-40'598			9	+42'120	-62'370			9	+59'917	- 4'133		
9	+ 5'995	-64'289			10	+27'188	- 8'447			9	+42'400	-51'590			9	+60'010	- 6'682		
10	+ 6'266	-22'319			12	+27'414	-14'313			11	+42'686	-61'106			9	+60'586	- 6'430		
11	+ 7'896	-30'530			14	+27'747	- 2'540	65 3079	10'0	10	+43'342	-41'270			9	+60'996	- 9'906		
10	+ 8'169	-47'750			9	+28'244	-34'979			9	+43'544	- 4'871			11	+61'856	-42'359		
11	+ 8'285	-45'311			13	+28'462	-48'599			14	+43'887	-25'675			12	+62'193	-19'711		
12	+ 8'691	-41'488			10	+28'986	-64'052			9	+44'572	-39'914			9	+62'733	-52'949		
9	+ 9'047	-55'425			9	+29'081	- 1'428			15	+45'044	- 7'329	66 2793	9'6	15	+62'744	-47'595	66 2800	9'3
	731					791					851					911			
10	+ 9'244	-20'367			19	+29'102	-48'132	66 2784	9'0	9	+45'145	-12'498			9	+62'827	-31'491		
9	+10'142	-30'725			14	+29'380	-20'567			9	+45'281	- 3'009			14	+63'554	-47'544	66 2802	9'4
10	+10'820	-59'880			11	+29'546	-11'831			9	+45'629	-52'462			12	+63'994	-51'629		
15	+11'113	- 8'500	66 2778	9'6	9	+29'750	-34'185			10	+45'729	-29'445			14	+64'386	- 9'496	66 2801	10'0
9	+11'355	-28'192			9	+30'680	-15'842			14	+45'865	-51'489							
10	+11'522	-21'902			22	+30'794	-64'672	66 2786	9'1	10	+45'929	-16'628							
14	+11'677	-28'230	66 2779	9'9	12	+30'815	-14'498			9	+46'222	-26'374							
10	+11'817	-18'348			9	+30'831	-47'305			10	+46'357	-26'947							
11	+12'258	-49'997			16	+31'228	-17'404	66 2785	9'7	11	+46'357	-25'355							
10	+12'910	-46'489			10	+31'518	-43'302			9	+46'953	-47'004							
	741					801					861								
11	+13'316	-26'902			11	+32'067	-30'336			18	+47'059	- 1'992	65 3093	9'5					
9	+13'620	-11'664			9	+32'072	-40'508			14	+47'513	- 9'271							
11	+13'720	-50'611			9	+32'429	-49'241			9	+47'692	-38'010							
22	+13'759	- 2'238	65 3067	9'2	10	+32'964	-53'901			9	+47'865	-49'937							
9	+13'986	-21'440			14	+33'326	-37'799			9	+48'196	-19'008							
15	+15'317	-50'796	66 2781	9'4	9	+33'704	-38'557			10	+48'410	-13'541							
11	+15'352	- 9'761	66 2780	9'8	9	+34'555	-28'744			9	+49'449	- 3'587							
9	+15'453	-18'341			9	+34'721	-54'940			9	+49'541	- 5'964							
10	+15'563	- 4'415			9	+34'729	- 0'709			9	+50'067	-18'682							
9	+16'301	- 0'733			19	+34'843	-31'365	66 2787	9'5	9	+50'084	-47'481							
	751					811					871								
10	+16'612	-42'123			9	+34'979	-31'900			11	+50'310	-44'649							
9	+17'303	-27'657			9	+35'725	-38'761			9	+50'460	- 7'402							
11	+17'308	-40'750			15	+35'761	- 7'101	66 2788	9'5	9	+50'588	- 2'997							
9	+17'431	-52'302			9	+35'800	-29'361			9	+50'716	-51'199							
10	+17'711	-35'462			9	+35'813	-33'376			9	+50'844	-13'340							
12	+18'135	-56'636			10	+36'157	-25'202			9	+51'120	-51'481							
9	+18'538	-32'093			9	+36'217	-55'664			9	+52'354	-20'510							
9	+18'646	- 8'770			9	+36'843	-17'129			9	+52'367	-41'913							
15	+19'018	-24'819	66 2782	9'5	32	+37'080	-60'977	66 2789	7'9	12	+53'254	- 8'000							
10	+19'264	-28'798			9	+37'364	- 4'375			9	+53'292	- 1'451							
	761					821					881								
14	+19'299	-46'801	66 2783	10'0	9	+37'465	-16'002			9	+53'547	-22'878							
9	+19'531	-48'953			10	+37'564	-42'712			11	+53'666	-41'606							
9	+20'127	-51'064			10	+37'828	-31'650			9	+53'677	-58'612							
9	+20'502	- 2'910			14	+37'834	-48'379			14	+54'509	-21'684	66 2795	9'9					
9	+20'588	- 2'534			22	+37'904	- 0'603	65 3085	9'0	12	+54'597	-46'361							
9	+21'027	-56'854			14	+38'086	-36'747			13	+54'600	-42'491							
24	+21'985	- 2'648	65 3072	8'6	10	+38'136	-42'970			9	+55'072	-16'245							
9	+21'988	-18'314			9	+38'364	-35'302			9	+55'429	-33'460							
9	+22'033	-22'240			20	+38'575	-63'174	66 2790	9'0	10	+55'539	-54'235							
9	+22'446	-47'421			9	+39'206	-37'518			12	+56'153	-53'921							

RECTANGULAR CO-ORDINATES.

15^h 36^m, - 66°

C.P.D.					C.P.D.					C.P.D.					C.P.D.									
Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.	Diam.	<i>x</i>	<i>y</i>	No.	Mag.					
PLATE CENTRE. 15 ^h 36 ^m , - 66°. Plate 1306. 1895, June 17. PROVISIONAL CONSTANTS. <i>a</i> = - .01138 <i>d</i> = + .00094 <i>b</i> = - .00116 <i>e</i> = - .01112 <i>c</i> = - .0658 <i>f</i> = - .0003 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$					51, 12 -47°54 + 7°066 9 -47°312 + 6°515 11 -47°304 + 50°659 12 -47°072 + 46°799 11 -47°039 + 35°942 13 -46°911 + 5°246 11 -46°059 + 16°960 11 -45°614 + 33°092 13 -45°242 + 55°180 9 -44°863 + 49°531 61 9 -44°443 + 45°548 9 -44°118 + 20°539 14 -44°033 + 30°362 13 -43°981 + 26°296 14 -43°806 + 4°039 10 -43°098 + 52°044 13 -42°661 + 5°645 9 -42°232 + 49°475 13 -41°694 + 52°244 11 -41°157 + 42°938 71 12 -40°542 + 18°225 10 -40°308 + 24°437 11 -40°072 + 44°228 9 -40°016 + 1°803 9 -39°461 + 59°193 14 -39°330 + 19°739 9 -39°117 + 44°766 12 -38°875 + 20°169 10 -38°250 + 22°629 13 -37°640 + 45°682 81 9 -37°507 + 26°809 9 -37°279 + 40°904 9 -37°253 + 37°768 12 -36°740 + 33°801 9 -36°585 + 22°133 13 -35°779 + 4°393 9 -35°688 + 60°064 10 -35°205 + 4°069 12 -34°469 + 64°060 9 -33°993 + 33°531 91 9 -33°852 + 51°416 11 -32°931 + 26°717 10 -32°886 + 26°246 22 -31°670 + 40°173 10 -30°951 + 26°998 10 -30°889 + 8°851 13 -29°929 + 56°412 14 -29°660 + 57°753 9 -28°535 + 55°365 12 -28°010 + 58°067 101 10 -27°968 + 59°659 10 -27°708 + 61°561 10 -27°295 + 14°088 14 -26°318 + 63°416 11 -25°759 + 58°241 10 -25°657 + 14°686 9 -25°043 + 60°163 10 -24°828 + 53°751 14 -24°177 + 31°863 12 -23°838 + 46°099					111, 9 -23°682 + 52°783 14 -23°558 + 63°896 10 -21°075 + 43°137 11 -20°769 + 18°380 9 -19°627 + 62°944 13 -19°568 + 19°299 10 -18°800 + 49°212 9 -18°651 + 56°296 10 -17°817 + 38°891 10 -16°835 + 31°078 121 12 -16°711 + 51°972 9 -16°401 + 32°551 16 -15°986 + 18°421 9 -15°780 + 45°132 9 -15°777 + 42°230 10 -15°601 + 56°496 14 -15°412 + 24°165 9 -15°318 + 49°490 11 -15°207 + 57°039 10 -15°148 + 27°720 131 10 -14°801 + 51°453 9 -14°369 + 33°891 9 -13°879 + 40°745 15 -13°724 + 5°760 10 -13°262 + 11°325 13 -12°327 + 23°569 9 -10°611 + 62°438 9 -10°577 + 53°158 13 -10°532 + 9°378 10 -10°432 + 11°922 141 10 -9°743 + 45°924 12 -9°692 + 8°921 15 -8°893 + 21°995 10 -6°863 + 4°108 10 -6°264 + 25°601 9 -5°909 + 56°918 34 -5°821 + 56°456 9 -5°728 + 51°741 13 -5°063 + 2°201 13 -4°894 + 52°367 151 11 -3°070 + 44°524 10 -3°020 + 62°294 11 -2°850 + 34°979 10 -2°011 + 36°403 10 -1°685 + 34°882 9 -1°396 + 48°230 10 -1°099 + 14°802 12 -0°734 + 26°129 14 -0°630 + 57°234 11 -0°163 + 28°381 161 11 + 0°326 + 31°170 10 + 0°400 + 28°013 14 + 1°375 + 44°682 19 + 2°053 + 34°466 10 + 2°073 + 0°135 13 + 2°434 + 36°071 9 + 2°470 + 60°065 17 + 3°994 + 50°539 9 + 4°924 + 5°063 9 + 5°654 + 33°575					171, 10 + 6°422 + 38°930 9 + 6°856 + 26°696 11 + 6°907 + 58°611 13 + 6°974 + 9°212 9 + 7°452 + 56°713 13 + 7°764 + 54°467 10 + 7°872 + 57°254 14 + 7°881 + 60°363 9 + 8°399 + 46°722 9 + 8°526 + 5°439 181 9 + 9°380 + 33°414 11 + 9°403 + 63°337 13 + 9°860 + 26°767 9 + 9°912 + 59°927 10 + 9°969 + 11°489 10 + 10°028 + 13°823 10 + 10°601 + 50°188 11 + 10°722 + 10°569 12 + 11°680 + 35°226 9 + 11°928 + 48°763 191 10 + 12°076 + 49°088 10 + 12°580 + 22°213 10 + 13°100 + 56°610 15 + 13°469 + 61°191 10 + 13°564 + 29°220 12 + 13°657 + 50°132 11 + 13°923 + 0°288 9 + 14°041 + 45°709 11 + 14°493 + 6°450 10 + 14°782 + 13°309 201 9 + 15°472 + 48°785 9 + 16°097 + 23°519 11 + 17°002 + 47°520 9 + 17°075 + 37°328 9 + 17°203 + 26°987 12 + 17°283 + 8°859 12 + 17°593 + 11°013 64 + 17°794 + 52°742 10 + 19°018 + 15°912 10 + 19°146 + 15°898 211 9 + 19°514 + 18°214 17 + 19°607 + 48°840 11 + 19°737 + 19°286 12 + 19°754 + 0°313 10 + 20°099 + 48°522 11 + 20°757 + 20°135 14 + 21°075 + 9°339 9 + 21°717 + 4°504 10 + 21°780 + 57°846 9 + 21°945 + 63°354 221 11 + 22°919 + 4°158 9 + 23°497 + 48°744 10 + 24°078 + 32°348 10 + 25°142 + 8°093 9 + 25°939 + 37°517 12 + 27°082 + 25°196 10 + 27°958 + 17°145 12 + 28°337 + 18°035 11 + 28°362 + 25°037 13 + 28°465 + 1°302									
11 -64°922 + 6°737 9 -64°803 + 41°900 12 -64°730 + 19°621 12 -64°055 + 43°670 9 -63°835 + 57°628 9 -63°800 + 5°939 10 -63°668 + 11°972 10 -63°574 + 6°868 9 -62°386 + 3°628 9 -62°362 + 3°722 11 14 -61°999 + 20°697 11 -61°769 + 9°547 9 -61°391 + 26°201 10 -61°271 + 4°062 10 -61°246 + 19°123 9 -60°954 + 5°973 11 -59°992 + 33°431 40 -59°936 + 4°166 10 -58°889 + 12°804 10 -58°312 + 34°855 21 10 -58°118 + 33°283 11 -57°809 + 27°386 10 -57°725 + 5°921 14 -56°918 + 1°449 10 -56°775 + 26°980 10 -56°077 + 44°578 9 -55°955 + 58°908 11 -55°936 + 46°274 44 -55°074 + 43°046 13 -54°858 + 24°893 31 9 -54°362 + 3°988 10 -54°094 + 2°940 10 -54°040 + 12°549 10 -53°841 + 42°892 12 -53°235 + 64°615 12 -52°798 + 61°143 9 -52°548 + 1°324 64 -52°006 + 0°356 11 -51°158 + 10°322 13 -50°539 + 28°608 41 11 -50°290 + 10°042 9 -49°844 + 7°544 10 -49°814 + 29°468 11 -49°569 + 18°263 9 -49°236 + 5°973 9 -49°121 + 63°686 11 -49°115 + 61°189 9 -49°068 + 24°498 11 -48°950 + 33°939 9 -48°786 + 52°541					65 3095 10°0 65 3096 9°1 65 3097 7°9 65 3098 9°4 65 3100 7°2 65 3099 9°6 64 3214 10°0 64 3216 9°6 65 3102 6°2 65 3103 9°4 65 3104 10°0					65 3105 9°6 64 3222 9°7 65 3108 9°5 65 3107 9°9 65 3106 9°4 65 3109 10°0 65 3110 9°4 65 3111 9°7 65 3112 9°2 65 3113 10°0 65 3114 10°0 65 3115 9°4 64 3230 9°8 65 3116 8°2 64 3234 9°8 64 3235 9°8 64 3238 9°2 65 3117 9°0 65 3118 9°9					64 3241 9°2 65 3119 9°6 65 3120 9°5 65 3121 8°8 65 3122 9°2 65 3123 9°2 65 3124 9°5 65 3125 9°8 65 3126 9°9 65 3127 9°1 64 3251 8°0 65 3128 9°4 65 3129 9°5 64 3255 9°4 65 3130 9°2 65 3131 8°6 65 3132 9°5 65 3133 8°6					65 3134 9°9 65 3135 9°8 64 3258 9°2 65 3136 9°7 64 3265 9°0 65 3137 10°0 65 3139 6°3 65 3140 9°8 65 3141 8°6 65 3142 10°0 65 3143 9°2 65 3144 9°9				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
II	231,				II	291,				II	351,				II	411,			
9	+28'568	+32'366			14	+51'066	+20'504			10	-54'983	-21'670	66 2795	9'9	10	-26'526	-34'021		
9	+28'909	+17'405			10	+51'096	+46'370	65 3158	9'1	28	-54'401	-41'595			10	-26'502	-29'280		
9	+29'053	+62'841			9	+51'150	+15'072			9	-53'311	-13'646	66 2796	8'8	9	-26'396	-14'192		
10	+29'242	+54'342			12	+51'188	+28'473			10	-53'227	-33'336			12	-26'290	-12'427	66 2811	10'0
9	+29'298	+56'288			12	+51'491	+ 6'650			10	-53'173	-58'606			12	-26'096	-31'114		
10	+29'508	+12'860			12	+51'913	+33'940	65 3160	9'6	11	-53'142	-46'291			10	-25'940	- 0'484		
11	+29'816	+38'166			11	+52'404	+18'362			15	-52'814	- 0'783	65 3101	8'9	10	-25'891	-35'273		
10	+30'098	+48'716			13	+52'553	+31'184	65 3161	9'4	11	-52'053	-23'542			11	-25'358	-56'725		
9	+30'796	+55'994			11	+52'991	+ 1'975			9	-51'889	- 8'979			9	-25'233	- 1'642		
10	+31'032	+36'683			10	+53'257	+16'462			19	-51'839	-13'709	66 2798	8'6	10	-24'194	-55'321		
	241				10	301					361					421			
11	+31'358	+31'899			10	+53'991	+56'286			9	-51'690	-62'262			9	-23'952	-31'861		
11	+31'640	+20'127			14	+54'029	+ 8'174	65 3162	9'4	10	-51'640	-54'060			12	-23'180	- 7'669		
11	+31'881	+54'532	65 3145	9'7	12	+56'297	+37'372	65 3163	9'6	12	-51'058	-53'711			10	-23'034	-63'977		
10	+32'628	+ 1'116			9	+56'872	+13'070			9	-50'850	-29'414			15	-22'874	-16'187	66 2812	9'0
12	+32'652	+ 0'330	65 3146	9'6	9	+56'961	+17'076			10	-50'573	- 6'307			10	-21'359	-38'552		
14	+32'663	+ 5'285	65 3147	9'3	10	+57'708	+25'648			12	-50'348	-61'283			10	-20'677	-50'999		
9	+32'710	+ 3'590			9	+57'995	+16'970			14	-49'801	-59'044	66 2799	9'3	11	-18'571	-26'851		
9	+33'278	+61'952			14	+58'407	+53'926	65 3164	9'0	11	-47'470	-19'156			10	-18'431	-17'151		
10	+33'359	+34'348			9	+58'744	+ 5'356			9	-47'352	-57'653			11	-18'316	-57'016		
10	+33'669	+17'497			11	+58'806	+26'733			11	-46'187	-41'761			13	-17'894	-31'798	66 2813	9'4
	251					311					371					431			
10	+34'143	+30'550			9	+58'926	+32'045			9	-46'007	-30'854			11	-16'033	-62'986		
9	+34'626	+60'211			13	+59'106	+ 5'246	65 3166	9'6	13	-45'996	- 8'809	66 2801	10'0	11	-15'738	-53'807		
11	+34'672	+ 0'935	65 3148	9'7	10	+59'159	+64'857			14	-44'931	-46'925	66 2800	9'3	10	-15'657	-61'003		
9	+34'901	+ 4'578			9	+59'446	+34'807			11	-44'721	- 1'599			11	-14'917	-39'275		
9	+35'259	+16'697			28	+59'678	+22'901	65 3165	8'5	14	-44'657	-13'078	66 2803	9'3	10	-13'993	-39'575		
9	+35'282	+61'381			10	+59'738	+ 5'457			10	-44'565	-52'260			9	-12'235	-40'544		
11	+35'443	+28'251			9	+59'840	+46'419			13	-44'136	-46'813	66 2802	9'4	9	-10'973	-34'113		
9	+35'638	+50'768			9	+59'891	+ 9'740			12	-43'887	-50'880			10	-10'832	-45'664		
12	+35'672	+10'246	65 3149	9'4	11	+59'927	+13'345	65 3167	9'6	9	-42'472	-42'918			10	- 9'066	- 5'799		
11	+36'047	+29'737			11	+60'436	+12'301			10	-42'350	-19'485			24	- 8'788	-12'089	66 2815	8'4
	261					321					381					441			
10	+36'944	+31'206			13	+61'542	+ 0'843	65 3169	9'1	9	-40'756	-25'838			12	- 8'642	-25'506	66 2814	9'7
10	+37'816	+29'117			11	+61'608	+34'786			9	-40'598	-62'922			9	- 5'596	-64'984		
23	+38'201	+29'219	65 3150	8'9	14	+61'847	+39'196	65 3168	9'3	10	-40'419	- 9'050			9	- 4'991	-56'817		
11	+38'571	+51'713			10	+61'925	+12'527			9	-39'677	-23'361			11	- 4'547	- 4'123		
9	+39'206	+48'380			10	+62'241	+34'293			10	-39'549	-50'496			14	- 4'401	-32'266	66 2818	9'2
15	+39'457	+14'718	65 3151	9'0	11	+62'275	+ 9'848			10	-39'130	-29'742			15	- 4'332	-45'616	66 2817	9'4
11	+39'576	+52'470			9	+63'191	+49'519			12	-38'762	-17'841	66 2804	9'9	9	- 4'289	-58'387		
11	+39'690	+18'079			9	+63'519	+26'243			9	-38'546	- 7'807			10	- 3'930	-38'382		
11	+40'105	+62'946			10	+63'732	+49'919			12	-36'986	-21'185			10	- 3'621	- 9'224		
9	+41'776	+40'359			9	+64'592	+64'650			9	-36'324	-47'468	66 2805	9'8	10	- 2'673	-11'954		
	271					331					391					451			
14	+41'833	+14'863	65 3153	8'9	9	+64'609	+43'331			22	-35'451	-11'068	66 2806	8'4	9	- 2'242	-22'544		
9	+42'051	+15'042			9	-64'696	-41'991			9	-35'342	-37'524			14	- 2'145	-33'311	66 2819	9'3
10	+42'064	+41'020			10	-63'977	-61'827			12	-34'312	-21'709			14	- 1'913	-41'572	66 2820	9'6
12	+42'086	+ 3'807			11	-63'905	-17'230			12	-33'487	-18'083			13	- 1'158	-60'497		
11	+43'324	+30'523			13	-63'827	- 2'562	65 3093	9'5	11	-33'458	-12'990			10	- 0'470	-43'994		
9	+43'497	+37'855			9	-63'169	-30'038			11	-33'267	-13'542			9	+ 0'126	-58'443		
14	+44'395	+ 8'654	65 3154	9'0	10	-62'850	-25'907			11	-33'123	-40'408			11	+ 0'516	-52'829		
10	+44'429	+ 8'127			12	-62'850	- 9'792			11	-32'582	-23'267			10	+ 0'602	- 8'657		
9	+44'802	+10'526			9	-62'740	-27'489			9	-32'512	- 1'306			10	+ 0'745	-60'396		
12	+45'693	+44'644	65 3155	9'6	10	-62'141	- 0'050			12	-30'502	-60'216	66 2807	10'0	9	+ 1'233	- 6'161		
	281					341					401					461			
9	+45'942	+ 9'352			9	-61'650	-13'993			14	-29'822	-13'642	66 2808	9'2	9	+ 2'038	-52'106		
11	+46'656	+13'532			12	-61'490	-52'016			9	-28'793	-56'107			12	+ 2'349	-64'848		
9	+46'766	+ 4'101			9	-61'315	- 3'984			10	-27'975	- 7'431			14	+ 2'751	- 8'085	66 2821	9'3
9	+47'098	+17'341			9	-61'060	- 6'353			14	-27'728	-29'232	66 2809	9'2	9	+ 3'038	-47'834		
9	+47'839	+21'728			9	-60'514	-50'410			9	-27'437	- 2'252			11	+ 3'204	-48'874		
12	+48'740	+ 3'026			10	-59'806	-47'390			11	-27'416	- 8'901			9	+ 3'243	-42'120		
11	+49'924	+27'767	65 3156	9'7	10	-57'521	-44'882			13	-27'219	-42'253	66 2810	9'6	9	+ 3'549	- 3'064		
10	+50'416	+20'625			12	-57'200	- 8'106			12	-26'818	-13'196			10	+ 3'566	-36'441		
13	+50'539	+ 5'712	65 3159	9'7	9	-55'852	-22'925			9	-26'698	-13'854			9	+ 3'902	-37'416		
10	+50'996	+49'161			9	-55'677	-41'995			10	-26'682	- 1'141			9	+ 4'483	-40'984		

RECTANGULAR CO-ORDINATES.

15^h 54^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471,					531,					591,				PLATE CENTRE. 15 ^h 54 ^m , - 66°. Plate 1552. 1896, July 1. PROVISIONAL CONSTANTS. a = - '01135 d = + '00027 b = - '00025 e = - '01115 c = - '0728 f = - '0272 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f				
9	+ 5'313	-41'764			II	+34'473	-49'140	66 2835	9'6	IO	+57'237	- 6'542			9	-64'849	+21'216		
9	+ 5'963	-63'503			9	+35'280	-29'254			IO	+57'536	-39'377			9	-64'637	+ 3'566		
9	+ 6'851	-34'703			IO	+35'316	- 2'822			9	+58'829	-54'247			9	-63'778	+25'065		
9	+ 7'118	-51'300			9	+35'334	-33'536			IO	+59'574	-37'593			II	-63'686	+48'800		
9	+ 7'369	-48'872			9	+35'405	-63'510			IO	+61'217	-63'358			18	-63'385	+46'025	65 3158	9'1
IO	+ 7'532	- 5'763			9	+35'868	-16'637			II	+62'625	-30'461	66 2846	9'6					
IO	+ 8'906	- 5'441			IO	+36'340	-32'914			9	+62'736	-61'497							
I3	+ 9'125	-40'520	66 2822	9'8	II	+36'712	-63'232			9	+62'932	-44'033							
I3	+ 9'614	-32'627	66 2823	9'8	9	+36'886	-36'655			IO	+62'993	-46'607							
IO	+ 9'755	-50'035			IO	+37'242	-62'020			I3	+63'660	-26'426	66 2847	9'3					
	481					541					601								
I2	+12'656	-63'951	66 2824	9'7	IO	+37'428	-32'040			9	+63'798	-34'103			9	-62'022	+ 9'448		
I2	+13'141	-26'270			II	+37'911	-59'462			9	+63'829	- 6'353			9	-61'988	+28'172		
IO	+13'358	-14'060			9	+38'624	-21'654			IO	+64'303	-62'206			9	-61'697	+53'386		
9	+13'545	-42'457			9	+38'945	-51'942			9	+64'380	-43'867			I4	-61'671	+33'691	65 3160	9'6
9	+14'008	-49'513			I3	+39'208	-45'596	66 2836	9'3					II	-61'531	+20'228			
II	+15'022	- 7'179			I3	+40'128	- 1'558	65 3152	9'4										
I3	+15'446	- 3'590	65 3138	9'4	IO	+40'344	- 8'682							IO	-61'208	+56'123			
I3	+15'556	-32'465	66 2825	9'6	IO	+41'063	-12'104							IO	-61'065	+14'824			
9	+15'884	- 9'485			II	+41'417	-50'872							I5	-60'984	+ 5'433	65 3159	9'7	
IO	+16'944	-31'436			IO	+41'935	-16'680							9	-60'896	+30'908			
	491					551								18	-60'816	+30'989	65 3161	9'4	
I3	+17'158	-61'220	66 2826	9'6	9	+42'517	-33'040							9	-60'125	+ 3'006			
II	+17'858	- 6'334			IO	+42'560	-10'672							I3	-60'110	+ 6'441			
9	+18'700	-49'583			IO	+42'581	-43'534							IO	-60'056	+18'187			
II	+19'121	-17'848			IO	+43'282	-30'438							9	-59'840	+16'797			
9	+19'746	-28'627			II	+43'391	-58'569							9	-59'338	+24'483			
I2	+20'213	-41'329	66 2827	9'6	II	+44'742	-38'656							IO	-59'066	+16'359			
I3	+20'449	-52'685	66 2828	9'7	II	+45'311	- 8'697							9	-59'027	+57'934			
I2	+21'580	-45'822			I5	+46'042	-20'566	66 2837	9'0					9	-58'544	+28'652			
9	+21'746	-32'970			9	+46'474	- 0'451							9	-58'340	+15'136			
I2	+21'758	-48'900			IO	+46'846	-42'628							9	-58'265	+ 9'780			
	501					561									31				
II	+21'898	-26'296			II	+47'020	-25'111							II	-58'264	+ 1'879			
IO	+22'390	-36'815			9	+47'182	-24'273							9	-58'101	+57'121			
IO	+22'890	-20'315			I3	+48'048	- 9'617	66 2838	9'4					9	-58'101	+51'777			
IO	+23'150	-32'814			II	+48'453	-48'215	66 2840	9'7					I6	-57'701	+ 8'143	65 3162	9'4	
9	+23'289	-60'605			9	+48'519	- 0'913							9	-57'554	+37'420	65 3163	9'6	
IO	+23'958	- 7'197			I2	+48'890	-14'312	66 2839	9'3					9	-57'311	+48'931			
II	+24'086	-15'470			IO	+49'007	- 1'773							9	-56'773	+26'586			
I3	+24'102	- 9'375			9	+49'169	-42'112							9	-56'691	+47'360			
I3	+24'631	-16'968	66 2829	9'7	9	+49'290	-11'780							24	-56'641	+54'081	65 3164	9'0	
I3	+25'219	-64'360	66 2830	9'4	IO	+49'309	-36'428							9	-55'977	+26'544			
	511					571									41				
I2	+25'248	-28'180			I4	+49'499	- 5'015	65 3157	9'1					9	-55'552	+33'045			
17	+25'510	-53'052	66 2831	8'7	IO	+50'699	-23'850							9	-55'390	+17'231			
IO	+25'720	-27'039			I2	+51'246	-58'456							9	-55'350	+32'681			
9	+26'833	-52'577			IO	+51'353	-23'276							IO	-55'282	+25'846			
IO	+27'140	-35'259			IO	+51'526	-27'160							9	-55'201	+13'232			
IO	+27'281	-21'321			IO	+51'828	-42'113							9	-54'690	+46'701			
I5	+27'738	-11'236	66 2832	9'0	I3	+52'529	-28'262	66 2841	9'4					IO	-54'611	+58'372			
II	+27'748	-32'197			9	+53'106	-12'001							IO	-54'551	+32'309			
II	+28'275	-51'577			IO	+53'970	-17'379							9	-54'500	+ 4'370			
9	+28'476	-15'454			II	+54'810	-12'993							9	-54'388	+17'205			
	521					581													
9	+29'100	-33'019			I2	+55'048	-38'163	66 2842	9'4										
I3	+30'546	-38'457	66 2833	9'3	9	+55'551	-37'447												
9	+30'594	-16'124			IO	+55'712	-39'575												
9	+31'245	-34'417			9	+55'759	- 6'573												
9	+31'417	-11'785			II	+55'910	-44'972	66 2843	9'7										
9	+31'897	-17'918			IO	+56'643	-12'529												
II	+32'316	-13'714	66 2834	9'6	II	+56'650	-24'214	66 2844	9'6										
9	+32'966	-29'676			IO	+57'018	-41'718												
9	+34'124	-21'131			II	+57'030	-13'439												
9	+34'397	-48'763			II	+57'112	-41'774	66 2845	9'5										

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51					111					171					231			
11	-54'291	+27'006			9	-43'960	+54'024			23	-32'900	+32'883	65 3179	8'6	9	-21'642	+52'585		
9	-54'226	+35'081			12	-43'943	+11'089			16	-32'858	+32'788			9	-21'634	+48'057	65 3189	9'7
9	-53'873	+42'098			9	-43'914	+5'650			9	-32'459	+64'864			14	-21'360	+16'288		
9	-53'856	+16'385			9	-43'546	+14'338			9	-32'220	+12'762			9	-21'356	+4'530		
9	-53'398	+15'849			9	-43'472	+48'102			9	-32'049	+57'251			9	-21'250	+49'933		
36	-53'132	+23'237	65 3165	8'5	9	-43'273	+59'687			12	-31'835	+26'300	65 3180	9'6	9	-21'192	+56'431		
9	-53'002	+48'310			9	-43'221	+60'677			9	-31'820	+43'990			12	-20'921	+18'899	65 3190	9'6
9	-52'803	+5'680			9	-43'217	+58'857			9	-31'810	+38'397			9	-20'760	+61'162		
14	-52'415	+5'589	65 3166	9'6	9	-42'865	+5'625			9	-31'787	+22'036			9	-20'332	+48'601		
9	-52'340	+59'115			9	-42'696	+64'355			9	-31'735	+28'577			9	-19'836	+22'244		
	61					121					181					241			
9	-52'217	+56'681			9	-42'571	+5'805			9	-31'663	+47'479			12	-19'351	+54'629		
11	-52'197	+13'736	65 3167	9'6	10	-42'263	+10'318			10	-31'328	+19'165			9	-18'963	+64'536		
16	-52'140	+39'646	65 3168	9'3	9	-42'244	+18'977			9	-30'968	+46'144			10	-18'628	+57'853		
13	-52'068	+35'219			11	-42'084	+7'421			9	-30'920	+17'453			9	-18'391	+3'188		
9	-51'956	+10'120			10	-42'084	+6'433			9	-30'722	+25'362			9	-18'154	+15'114		
9	-51'890	+17'049			9	-41'888	+21'702			9	-30'569	+44'972			9	-18'133	+38'315		
9	-51'811	+5'845			9	-41'476	+15'224			9	-30'469	+54'528			9	-18'013	+55'192		
10	-51'594	+12'720			18	-41'392	+46'702	65 3175	9'0	9	-30'356	+7'609			9	-17'885	+63'192		
9	-51'530	+50'032			9	-41'384	+55'159			9	-29'774	+21'548			10	-17'723	+25'407		
12	-51'387	+34'777			18	-41'377	+56'861	64 3308	9'3	9	-29'509	+34'097			9	-17'584	+49'868		
	71					131					191					251			
9	-51'224	+2'224			9	-41'328	+61'360			9	-29'164	+63'158			9	-17'580	+42'996		
11	-51'031	+50'472			9	-41'318	+9'081			18	-29'100	+43'226	65 3183	9'2	10	-17'569	+2'595		
9	-51'009	+33'632			12	-40'877	+16'062			10	-29'049	+62'859			9	-17'543	+15'492		
9	-50'291	+34'505			9	-40'505	+12'256			9	-28'988	+23'308			14	-17'471	+0'747	65 3191	9'5
9	-50'132	+13'052			9	-40'428	+18'923			9	-28'889	+34'501			9	-17'230	+28'605		
10	-49'710	+43'958			9	-40'356	+61'579			14	-28'861	+30'177	65 3182	9'6	9	-17'102	+55'836		
16	-49'680	+1'371	65 3169	9'1	10	-39'900	+46'352			9	-28'701	+17'962			9	-16'943	+25'850		
10	-49'597	+10'414			9	-39'733	+24'713			9	-28'532	+26'366			9	-16'921	+51'502		
9	-49'546	+26'846			15	-39'572	+24'197	65 3176	9'3	9	-28'505	+33'035			9	-16'874	+24'255		
9	-48'508	+33'175			18	-39'535	+22'711	65 3177	9'2	17	-28'454	+61'210	64 3319	9'3	15	-16'736	+15'728	65 3192	9'4
	81					141					201					261			
9	-48'167	+59'576			9	-39'434	+36'987			9	-27'932	+28'446			9	-16'371	+36'004		
9	-48'152	+43'662			9	-39'345	+50'878			9	-27'871	+12'083			9	-16'237	+14'201		
10	-47'550	+36'331			9	-38'493	+26'064			9	-27'688	+20'500			9	-16'191	+29'868		
9	-47'498	+7'979			9	-37'996	+63'256			10	-27'670	+27'972			9	-16'157	+57'278		
9	-47'410	+64'448			9	-37'199	+27'876			32	-27'619	+21'454	65 3184	9'0	9	-16'123	+53'081		
9	-47'292	+62'880			9	-37'191	+46'596			9	-27'583	+23'066			9	-16'105	+64'320		
9	-47'016	+42'108			9	-37'053	+53'786			11	-27'278	+23'380			10	-16'052	+8'668		
10	-46'964	+45'482			10	-36'932	+47'030			10	-27'071	+32'473			32	-14'996	+23'640	65 3193	8'8
14	-46'960	+28'762	65 3170	9'7	9	-36'782	+45'065			20	-27'058	+49'072	65 3186	9'3	9	-14'986	+29'722		
9	-46'753	+17'413			9	-36'697	+21'340			13	-26'792	+29'347	65 3185	9'6	9	-14'398	+57'337		
	91					151					211					271			
10	-46'704	+47'429			9	-36'455	+50'340	65 3178	9'1	9	-26'639	+41'324			9	-14'295	+55'907		
9	-46'703	+55'119			19	-36'266	+50'416			10	-26'440	+37'185			26	-14'135	+38'169	65 3194	9'0
9	-46'540	+13'903			13	-35'450	+39'385			9	-26'330	+2'262			9	-13'832	+8'009		
9	-46'379	+31'081			14	-35'408	+32'652			9	-26'211	+59'099			10	-13'305	+40'512		
9	-45'943	+32'271			11	-35'373	+17'210			9	-25'982	+29'744			10	-13'082	+37'841		
9	-45'942	+52'441			9	-35'349	+55'762			12	-25'831	+13'978	65 3187	9'6	9	-12'986	+37'175		
16	-45'641	+36'881	65 3172	9'3	9	-35'239	+3'174			9	-25'778	+15'491			9	-12'781	+45'954		
9	-45'488	+31'079			9	-35'060	+50'801			11	-25'668	+56'535	64 3321	9'7	9	-12'459	+47'724		
16	-45'390	+8'115	65 3171	9'2	10	-35'060	+62'180			15	-24'759	+61'974	64 3323	9'7	22	-12'378	+64'492	64 3340	9'1
18	-45'317	+57'070	64 3306	9'3	9	-34'773	+36'072			10	-24'663	+25'368			9	-12'161	+51'730		
	101					161					221					281			
9	-45'207	+13'685			9	-34'677	+5'320			10	-24'266	+62'646			9	-11'942	+60'306		
9	-45'193	+29'874			12	-34'641	+8'193			9	-24'144	+20'080			12	-11'926	+33'415	65 3195	9'7
17	-45'172	+42'167	65 3173	9'2	10	-34'518	+44'056			10	-24'086	+0'888			9	-11'785	+21'652		
9	-45'104	+64'612			9	-34'221	+60'665			9	-24'078	+54'069			9	-11'655	+45'524		
11	-45'053	+62'047			9	-34'179	+3'125			9	-23'381	+50'817			17	-11'654	+38'951	65 3196	9'2
32	-44'888	+45'680	65 3174	8'6	9	-34'127	+63'423			15	-23'008	+20'665	65 3188	9'4	9	-11'413	+32'978		
9	-44'942	+38'335			12	-34'055	+57'193			9	-22'903	+57'822			9	-11'156	+33'020		
9	-44'862	+40'392			9	-33'983	+20'327			9	-22'820	+8'316			9	-10'896	+32'089		
10	-44'063	+29'648			9	-33'375	+59'565			9	-21'918	+29'665			15	-10'686	+62'681	64 3342	9'7
9	-44'012	+24'669			10	-33'309	+46'454			9	-21'730	+64'772			9	-10'259	+23'341		

RECTANGULAR CO-ORDINATES.

15^h 54^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
14	- 9°781	+25°564	65 3197	9'4	9	+ 5°902	+28°301			9	+16°846	+49°900			10	+31°085	+47°849		
9	- 9°734	+12°650			10	+ 6°155	+42°107			9	+16°877	+47°535			9	+31°221	+43°951		
9	- 9°642	+20°521			9	+ 6°587	+39°492			9	+17°101	+54°175			9	+31°282	+34°733		
9	- 9°601	+45°338			9	+ 6°617	+41°729			9	+17°519	+38°127			9	+31°414	+63°275		
19	- 8°798	+ 33°891	65 3198	8'9	11	+ 7°030	+63°353			9	+17°827	+18°467			15	+31°506	+53°766		
10	- 8°743	+51°139			19	+ 7°470	+45°452	65 3210	9'0	9	+17°903	+27°721			9	+31°522	+ 4°592		
9	- 8°492	+51°925			9	+ 7°841	+48°380			9	+18°508	+27°574			9	+31°550	+62°873		
9	- 8°186	+ 4°076			11	+ 8°032	+26°593			9	+18°613	+10°191			9	+31°630	+61°453		
22	- 8°175	+47°910	65 3199	9'2	9	+ 8°038	+27°806			9	+18°796	+37°047			9	+31°725	+47°514		
9	- 8°019	+47°578			9	+ 8°462	+26°445			17	+18°930	+40°891	65 3219	9'3	10	+31°962	+52°868		
	301					301					421					481			
17	- 7°661	+55°635	65 3200	9'3	12	+ 8°712	+37°236			14	+18°987	+60°507			11	+31°968	+61°846		
9	- 7°325	+46°319			9	+ 8°731	+44°013			9	+19°056	+16°774			9	+32°031	+14°426		
9	- 6°168	+37°635			9	+ 8°842	+56°429			9	+19°372	+58°014			11	+32°109	+37°532		
9	- 5°936	+ 5°489			9	+ 8°894	+ 8°209			9	+19°694	+38°086			9	+33°012	+16°786		
11	- 5°515	+47°446			9	+ 8°983	+43°093			16	+19°792	+57°975	64 3372	9'5	14	+33°415	+49°680	65 3226	9'7
15	- 5°477	+28°999	65 3201	9'6	9	+ 9°364	+59°877			16	+19°989	+30°047	65 3220	9'2	9	+33°419	+12°434		
9	- 5°320	+41°167			14	+ 9°412	+12°218	65 3211	9'3	9	+21°653	+58°179			9	+33°455	+51°123		
10	- 5°105	+43°836			58	+ 9°688	+ 25°421	65 3212	7'8	10	+21°673	+50°172			9	+33°779	+35°823		
9	- 5°074	+59°397			9	+10°013	+44°093			9	+22°007	+49°050			9	+34°048	+31°402		
9	- 4°190	+10°534			9	+10°191	+57°744			9	+22°187	+34°458			9	+34°210	+24°289		
	311					371					431					491			
9	- 4°090	+41°882			9	+10°219	+64°225			9	+22°256	+18°601			9	+34°273	+24°468		
9	- 4°031	+10°420			9	+10°982	+29°958			9	+22°677	+49°696			9	+34°376	+20°516		
9	- 3°674	+56°523			9	+11°131	+22°481			11	+23°592	+15°283			9	+34°400	+57°700		
9	- 3°402	+57°360			11	+11°142	+48°447			11	+23°851	+ 1°629			9	+34°860	+58°686		
10	- 3°249	+ 2°976	65 3202	9'6	9	+11°153	+29°439			10	+23°888	+15°051			9	+34°890	+43°512		
9	- 2°962	+52°364			9	+11°330	+ 7°907			9	+23°913	+52°536			20	+35°185	+58°288	64 3386	8'9
12	- 2°785	+43°566			9	+11°644	+26°433			9	+23°966	+ 3°808			20	+35°244	+58°242		
9	- 2°774	+53°049			9	+11°727	+59°616			36	+24°145	+ 3°312	65 3222	8'5	9	+35°332	+ 1°658		
14	- 2°512	+49°244	65 3203	9'6	9	+11°895	+55°472			9	+24°362	+37°555			10	+35°352	+51°270		
9	- 2°121	+27°751			9	+11°905	+61°623			9	+24°834	+59°026			9	+35°522	+28°605		
	321					381					441					501			
9	- 2°058	+17°715			9	+11°994	+14°447			9	+24°951	+42°058			9	+35°988	+52°306		
9	- 1°780	+49°976			9	+12°020	+30°156			9	+25°112	+33°569			9	+36°147	+41°150		
24	- 1°264	+38°055	65 3204	8'9	9	+12°039	+56°552			9	+25°127	+59°180			9	+36°257	+28°681		
9	- 1°036	+48°448			9	+12°786	+ 7°197	65 3213	9'4	10	+25°555	+33°602			10	+36°286	+41°228		
9	- 0°761	+43°312			11	+12°850	+ 7°239			9	+25°574	+47°819			11	+36°424	+ 9°175		
9	- 0°663	+38°913			9	+13°039	+ 3°192			9	+25°674	+52°076			9	+36°728	+56°223		
9	- 0°459	+63°157			9	+13°063	+42°393			9	+25°814	+ 4°859			10	+36°797	+53°904		
17	- 0°181	+31°588	65 3205	9'3	11	+13°129	+18°847	65 3214	9'6	11	+26°029	+56°750			15	+36°950	+24°449	65 3227	9'6
9	+ 0°074	+53°157			10	+13°135	+18°998			10	+26°450	+60°653			9	+36°992	+13°822		
11	+ 0°188	+58°036			9	+13°406	+57°160			9	+26°479	+ 3°864			9	+37°246	+43°294		
	331					391					451					511			
9	+ 0°403	+48°778			9	+13°421	+57°761			16	+26°616	+53°120	65 3223	9'6	10	+37°272	+22°404		
10	+ 0°602	+64°220			9	+13°425	+26°533			9	+26°805	+48°107			13	+37°348	+33°392		
9	+ 0°705	+45°018			10	+13°544	+64°483			9	+26°878	+57°624			9	+37°920	+21°229		
9	+ 0°713	+46°480			17	+13°677	+48°143	65 3215	9'3	10	+27°143	+36°174			10	+38°371	+14°226		
10	+ 0°903	+55°549			11	+13°712	+28°483			9	+27°184	+56°276			9	+38°604	+53°920		
9	+ 0°998	+23°055			11	+13°797	+45°322	65 3216	9'4	10	+27°273	+53°799			10	+38°674	+55°731	65 3228	9'6
9	+ 1°685	+43°847			11	+13°905	+45°412			9	+27°468	+ 4°182			14	+39°038	+23°087		
9	+ 1°734	+53°691			16	+13°908	+10°431	65 3217	9'4	9	+27°651	+ 2°540			10	+39°284	+44°522		
9	+ 2°441	+30°411			17	+13°956	+61°407	64 3367	9'3	9	+27°657	+ 0°478			9	+39°385	+11°682		
9	+ 3°448	+14°877			9	+14°077	+41°711			16	+ 27°830	+ 30°036	65 3224	9'0	9	+39°468	+56°829		
	341					401					461					521			
9	+ 3°573	+13°406			10	+14°096	+64°852			9	+27°879	+43°594			9	+39°499	+38°035		
10	+ 3°961	+14°404			9	+14°257	+44°859			9	+28°289	+18°477			9	+39°622	+41°258		
10	+ 4°089	+40°787			9	+14°430	+33°407			11	+28°507	+64°225			9	+39°923	+ 7°130		
10	+ 4°099	+11°399	65 3207	9'7	9	+14°666	+27°079			9	+28°822	+35°371			32	+40°255	+ 6°075	65 3230	8'8
9	+ 4°194	+57°159			24	+14°793	+64°229	64 33'9	8'8	24	+28°904	+ 6°173	65 3225	9'0	9	+40°411	+ 2°775		
9	+ 4°438	+58°632			9	+14°923	+35°744			11	+28°940	+12°410			18	+40°708	+45°236	65 3229	9'2
19	+ 4°531	+37°017	65 3208	9'1	26	+ 15°094	+ 45°584	65 3218	8'8	9	+30°342	+ 0°994			9	+41°469	+39°397		
9	+ 4°536	+60°363			10	+16°004	+60°199			9	+30°342	+54°652			31	+41°838	+21°264	65 3231	8'5
9	+ 5°266	+41°354			9	+16°557	+28°349			9	+30°516	+44°086			18	+42°244	+30°597	65 3232	9'3
9	+ 5°836	+64°096			9	+16°688	+22°862			9	+30°858	+ 7°025			9	+42°255	+25°481		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531					591					651					711			
13	+42'475	+1'185	65 3234	9'7	17	+57'744	+63'964	64 3407	9'2	9	-56'794	-35'991	66 2841	9'4	10	-43'614	-42'997		
9	+42'619	+21'850			9	+58'150	+64'850			17	-56'551	-28'304			18	-43'513	-8'301	66 2849	9'3
9	+42'777	+50'747			9	+58'236	+17'668			9	-56'264	-13'251			26	-42'978	-34'220	66 2848	9'0
9	+42'799	+50'398			16	+58'683	+10'618	65 3242	9'4	12	-56'232	-42'178			13	-42'376	-61'287		
9	+42'946	+46'907			9	+58'722	+28'889			9	-55'899	-17'351			9	-41'420	-16'797		
30	+42'978	+44'310	65 3233	9'0	9	+58'762	+32'016			9	-55'658	-22'572			9	-41'372	-57'546		
9	+43'195	+4'908			11	+58'939	+39'882			12	-55'629	-58'512			9	-41'229	-43'411		
9	+43'717	+49'336			10	+59'169	+30'206			12	-55'377	-12'918			9	-40'551	-37'562		
9	+44'074	+42'996			9	+59'312	+52'337			9	-54'907	-6'435			9	-40'259	-11'619		
9	+44'110	+45'128			9	+59'793	+39'664			9	-54'259	-7'277			9	-40'105	-37'007		
	541					601					661					721			
9	+44'745	+51'260			9	+59'886	+2'555			9	-54'063	-29'035			9	-39'994	-30'716		
10	+45'048	+58'692			9	+59'947	+11'470			9	-53'977	-42'169			9	-39'923	-16'686		
9	+45'671	+0'737			9	+59'962	+33'540			10	-53'581	-12'316			9	-39'826	-36'828		
12	+45'829	+31'621			9	+60'027	+30'450			9	-53'466	-3'634			11	-39'165	-29'816		
9	+46'185	+42'336			9	+60'286	+50'176			9	-53'442	-6'297			11	-39'040	-54'886		
9	+46'676	+14'112			12	+61'131	+10'495			9	-53'403	-15'514			24	-38'977	-43'393	66 2850	9'0
10	+46'915	+34'578			9	+61'391	+62'112			16	-53'325	-37'986	66 2842	9'4	10	-38'857	-8'328		
24	+47'220	+28'065	65 3235	9'1	9	+61'804	+50'924			9	-53'311	-7'363			9	-38'856	-36'251		
10	+47'286	+62'969			20	+62'125	+32'254	65 3243	9'2	11	-53'141	-13'202			12	-38'804	-51'878		
9	+47'582	+22'133			9	+62'193	+20'341			9	-52'867	-37'239			9	-38'584	-56'220		
	551					611					671					731			
9	+47'613	+42'346			9	+62'203	+28'065			12	-52'731	-23'971	66 2844	9'6	9	-38'388	-30'545		
9	+48'071	+33'133			9	+62'732	+50'908			9	-52'621	-6'021			9	-37'644	-58'284		
15	+48'105	+39'634			9	+63'254	+0'539			10	-52'567	-39'346			9	-37'555	-14'716		
9	+48'637	+17'131			11	+63'321	+43'971			9	-52'480	-1'647			9	-37'371	-57'128		
11	+48'760	+52'536			14	+63'913	+30'012	65 3244	9'4	9	-52'440	-27'988			10	-37'077	-13'058		
9	+49'544	+60'301			22	+63'971	+10'633	65 3247	8'8	9	-52'412	-3'556			10	-36'954	-50'788		
14	+49'732	+63'019	64 3395	9'6	9	+64'228	+50'150			9	-52'351	-24'175			10	-36'921	-56'138		
19	+50'131	+55'368	65 3236	9'1	18	+64'258	+29'763	65 3245	9'3	9	-51'981	-5'012			9	-36'776	-34'222		
9	+50'310	+24'417			9	-64'606	-1'004			13	-51'965	-44'721	66 2843	9'7	10	-36'763	-58'593		
12	+50'795	+32'497	65 3238	9'7	9	-64'201	-34'979			9	-51'604	-16'932			9	-36'639	-42'185		
	561					621					681					741			
19	+50'906	+54'440	65 3237	9'1	9	-63'812	-11'224			9	-51'542	-33'967			9	-36'396	-38'940		
9	+51'133	+3'803			19	-63'575	-21'109	66 2837	9'0	9	-51'133	-57'735			9	-36'196	-21'879		
13	+51'415	+63'698	64 3398	9'7	12	-63'568	-39'232			9	-51'103	-41'389			9	-36'033	-36'124		
9	+51'469	+46'825			11	-63'482	-59'208			9	-51'037	-40'453			9	-36'028	-24'061		
9	+51'650	+49'893			9	-62'523	-1'324			13	-51'005	-41'437	66 2845	9'5	9	-35'959	-41'059		
12	+51'684	+44'756			15	-62'367	-10'034	66 2838	9'4	11	-50'763	-39'020			9	-35'842	-36'595		
9	+51'790	+38'992			14	-62'264	-25'577			9	-50'144	-26'160			42	-34'980	-51'504	66 2851	8'3
23	+51'855	+54'173	65 3239	9'0	9	-62'162	-24'719			9	-50'056	-45'122			19	-34'652	-34'715	66 2852	9'1
9	+51'905	+0'831			9	-61'975	-2'146			10	-49'697	-47'421			9	-34'096	-21'991		
9	+52'088	+46'057			19	-61'258	-5'342	65 3157	9'1	9	-49'389	-4'800			12	-33'893	-20'349	66 2853	9'7
	571					631					691					751			
9	+52'245	+27'827			11	-61'176	-43'054			11	-48'848	-37'088			9	-33'711	-13'252		
9	+53'225	+55'292			16	-61'170	-14'668	66 2839	9'3	11	-48'747	-58'652			9	-33'472	-1'009		
9	+54'350	+8'944			9	-61'156	-8'071			9	-48'712	-16'590			9	-33'452	-39'965		
18	+54'397	+22'333	65 3240	9'4	9	-60'975	-15'939			10	-48'407	-53'754			9	-33'016	-30'596		
9	+54'590	+45'864			9	-60'968	-12'108			9	-48'283	-10'173			9	-32'977	-31'282		
9	+54'591	+31'374			9	-60'942	-23'224			9	-46'890	-10'472			10	-32'797	-48'981		
9	+54'595	+56'578			9	-60'560	-20'511			9	-46'868	-5'641			9	-32'636	-7'412		
9	+54'633	+56'614			9	-60'556	-15'966			15	-46'324	-29'774	66 2846	9'6	9	-31'920	-51'808		
9	+54'861	+1'645			9	-60'067	-15'440			18	-45'583	-25'665	66 2847	9'3	14	-31'020	-2'670	65 3181	9'6
9	+55'235	+15'482			9	-59'220	-0'898			9	-45'572	-61'435			9	-30'968	-57'273		
	581					641					701					761			
10	+55'237	+38'640			9	-59'191	-36'682			9	-45'561	-63'580			14	-30'263	-60'865		
9	+55'546	+58'690			13	-59'186	-48'505	66 2840	9'7	12	-45'369	-62'665			13	-29'744	-32'205	66 2854	9'7
9	+55'842	+46'603			9	-59'105	-1'700			9	-45'040	-43'269			9	-29'739	-39'724		
9	+56'135	+12'061			9	-58'893	-42'354			9	-44'904	-33'319			9	-29'584	-18'431		
9	+56'613	+11'651			10	-58'684	-24'041			12	-44'800	-45'829			10	-29'467	-40'903		
9	+56'883	+10'905			9	-58'448	-8'165			9	-44'720	-20'533			9	-29'330	-40'305		
9	+56'893	+39'203			10	-58'075	-23'447			9	-44'469	-39'106			11	-29'160	-57'933		
27	+57'292	+53'556	65 3241	8'8	12	-57'629	-27'280			10	-44'004	-60'692			9	-29'142	-44'277		
9	+57'538	+33'632			9	-57'417	-36'002			9	-43'757	-21'641			10	-28'899	-9'419		
11	+57'626	+45'569			9	-57'147	-12'054			9	-43'623	-17'785			9	-28'886	-34'697		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	771					831					891					951			
9	-28'717	-35'979			9	-16'290	-21'760			9	-1'238	-2'108			9	+14'685	-3'701		
10	-28'660	-43'780			9	-15'998	-50'346			9	-1'162	-51'085			9	+14'825	-29'040		
10	-28'433	-2'688			9	-15'881	-59'056			9	-1'091	-15'037			9	+14'827	-14'561		
9	-27'964	-21'918			9	-15'812	-47'231			9	-0'905	-18'326			9	+15'095	-40'841		
9	-27'950	-49'502			19	-15'674	-63'963	66 2864	9'2	9	-0'834	-61'752			9	+15'126	-34'443		
9	-27'814	-39'073			13	-15'649	-34'528			50	-0'833	-20'496	66 2877	8'3	9	+15'321	-49'060		
10	-27'494	-44'455			9	-15'503	-31'278			15	-0'605	-44'306	66 2878	9'4	14	+15'415	-56'893	66 2885	9'7
9	-27'036	-33'173			10	-15'197	-64'014			9	-0'301	-53'732			9	+15'658	-11'804		
10	-26'978	-24'248			9	-15'189	-31'117			9	-0'232	-45'805			11	+15'691	-55'451		
13	-26'761	-38'331			11	-15'156	-54'260			9	+0'240	-35'509			9	+15'875	-12'926		
	781					841					901					961			
19	-26'590	-26'408	66 2855	9'2	9	-14'963	-17'572			10	+0'303	-41'603			10	+16'864	-24'549		
18	-26'541	-17'556	66 2856	9'2	9	-14'856	-27'689			9	+0'533	-34'047			10	+16'944	-58'171		
9	-26'484	-10'738			9	-13'898	-25'532			18	+0'593	-28'655	66 2879	9'4	9	+16'993	-39'066		
9	-26'083	-36'657			12	-13'427	-53'544			9	+0'596	-25'065			18	+17'159	-56'735	66 2886	9'3
9	-25'940	-32'987			16	-13'322	-53'496	66 2865	9'2	9	+0'916	-30'749			10	+17'699	-5'124		
9	-25'748	-40'534			30	-12'832	-34'163	66 2866	8'9	9	+1'330	-51'070			10	+17'713	-18'920		
9	-25'484	-34'888			9	-12'812	-13'795			14	+1'486	-11'208	66 2880	9'6	9	+17'964	-03'709		
10	-25'412	-47'250			10	-12'503	-40'198			9	+1'836	-16'945			16	+18'051	-16'549	66 2887	9'3
9	-25'329	-51'919			9	-12'208	-49'578			9	+2'041	-60'520			10	+18'194	-27'727		
19	-24'809	-58'970	66 2857	9'2	13	-11'749	-24'438	66 2867	9'6	9	+2'221	-27'626			9	+18'265	-52'243		
	791					851					911					971			
9	-24'174	-45'812			9	-11'056	-43'305			9	+2'461	-49'827			9	+18'525	-53'939		
9	-24'097	-57'439			10	-10'812	-57'062			9	+3'353	-24'729			9	+18'598	-42'715		
19	-23'840	-46'246	66 2858	9'1	10	-10'646	-44'542			16	+3'739	-1'790	65 3206	9'3	9	+18'846	-19'161		
9	-23'692	-44'368			14	-9'897	-38'093	66 2868	9'6	10	+3'814	-7'134			9	+19'001	-13'218		
9	-23'529	-20'892			9	-9'656	-49'479			9	+3'862	-0'730			11	+19'123	-59'711		
9	-23'367	-18'153			10	-9'645	-41'946			11	+3'970	-45'118			9	+19'603	-42'870		
10	-23'247	-23'318			14	-9'352	-14'077	66 2869	9'4	11	+4'221	-61'704			9	+19'698	-42'030		
28	-23'199	-23'508	66 2859	8'9	14	-9'307	-7'836	66 2870	9'7	14	+4'318	-44'900	66 2881	9'6	9	+19'893	-8'805		
11	-23'113	-43'780			9	-9'238	-46'981			9	+4'706	-52'505			9	+20'134	-19'026		
9	-23'082	-63'250			9	-9'108	-62'890			9	+4'808	-11'456			9	+20'284	-21'530		
	801					861					921					981			
9	-23'003	-28'034			9	-8'136	-62'052			9	+5'651	-27'668			9	+20'406	-42'346		
9	-22'820	-17'389			9	-7'835	-19'756			9	+5'664	-37'623			9	+20'618	-15'998		
9	-22'736	-64'794			9	-7'822	-12'204			9	+5'922	-34'806			12	+20'758	-11'275		
11	-22'134	-32'671			9	-7'759	-62'096			10	+6'220	-56'956			9	+20'815	-3'930		
9	-20'767	-31'955			9	-7'589	-16'589			14	+6'489	-0'508	65 3209	9'4	9	+21'508	-5'214		
11	-20'508	-10'305	66 2861	9'6	11	-7'473	-18'836			9	+6'516	-14'422			9	+21'780	-62'666		
9	-20'459	-36'837			18	-7'022	-63'188	66 2871	9'1	9	+6'810	-53'905			9	+21'839	-48'099		
19	-20'200	-63'412	66 2860	9'2	9	-6'712	-64'582			9	+6'896	-38'151			9	+21'876	-3'157		
9	-19'917	-32'438			26	-5'897	-51'215	66 2872	9'0	13	+8'032	-14'976			9	+22'237	-24'345		
9	-19'737	-62'102			36	-5'343	-5'670	66 2873	8'8	15	+8'087	-39'837	66 2882	9'5	18	+22'313	-1'967	65 3221	9'2
	811					871					931					991			
9	-19'507	-3'830			9	-5'283	-57'978			9	+8'223	-0'925			15	+23'152	-45'607	66 2888	9'6
9	-19'470	-54'570			9	-5'203	-25'952			32	+8'295	-9'853	66 2883	8'8	11	+23'310	-28'745		
9	-19'234	-34'836			9	-5'007	-24'007			9	+8'332	-10'544			9	+23'323	-37'223		
9	-18'766	-36'787			10	-4'864	-42'088			9	+9'095	-1'132			19	+23'379	-45'966	66 2889	9'1
9	-18'762	-35'167			15	-4'730	-19'231	66 2874	9'3	9	+10'133	-28'496			10	+23'589	-58'247		
9	-18'724	-56'058			31	-4'667	-16'709	66 2875	8'8	16	+11'001	-44'279	66 2884	9'6	9	+23'776	-60'988		
18	-18'715	-46'862	66 2862	9'1	9	-4'510	-43'578			9	+11'034	-54'577			9	+23'937	-11'272		
9	-18'669	-32'762			9	-4'394	-36'932			9	+11'193	-42'723			9	+24'093	-6'582		
11	-18'488	-46'292	66 2863	9'7	9	-4'268	-49'312			9	+11'376	-15'576			9	+24'233	-35'101		
11	-18'418	-1'173			9	-3'953	-13'066			9	+11'476	-63'619			9	+24'452	-60'664		
	821					881					941					1001			
10	-18'225	-39'653			9	-3'766	-61'398			9	+11'828	-36'739			9	+24'588	-14'555		
9	-17'978	-3'309			9	-3'656	-51'685			10	+12'644	-37'770			32	+24'650	-60'616	66 2892	8'3
9	-17'911	-40'528			9	-3'431	-53'496			9	+12'917	-1'353			15	+24'670	-48'239	66 2891	9'7
9	-17'890	-41'908			16	-2'481	-33'899	66 2876	9'3	9	+13'568	-39'205			15	+24'789	-19'182	66 2890	9'5
9	-17'761	-25'196			9	-2'359	-53'442			9	+13'848	-31'794			10	+25'275	-41'252		
9	-17'653	-52'426			12	-2'318	-45'308			9	+14'029	-2'885			10	+25'351	-36'127		
9	-17'246	-51'315			9	-2'234	-28'498			9	+14'309	-4'117			17	+25'710	-53'430	66 2893	9'4
10	-17'126	-43'131			9	-1'608	-2'671			13	+14'482	-55'139			11	+25'983	-2'188		
9	-16'841	-45'608			9	-1'511	-31'583			9	+14'668	-57'479			9	+26'216	-47'879		
9	-16'629	-47'888			9	-1'320	-21'946			10	+14'680	-48'197			9	+26'321	-0'526		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	1011					1071					1131				PLATE CENTRE. 16 ^h 12 ^m , - 66°. Plate 3940. 1915, July 1. PROVISIONAL CONSTANTS. a = - .01162 d = - .00077 b = + .00088 e = - .01132 c = + .1916 f = + .0150 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f				
9	+26.465	-44.147			9	+36.714	-28.808			13	+52.284	-28.880			13	-64.595	+63.171	64 3398	9.7
9	+26.807	-54.157			9	+36.757	-0.997			9	+52.518	-32.888			20	-64.447	+53.906	65 3237	9.1
9	+27.012	-51.687			9	+36.785	-18.518			9	+52.571	-55.778			9	-63.999	+16.523		
9	+27.256	-50.789			13	+36.811	-33.032			9	+52.752	-6.842			22	-63.487	+53.715	65 3239	9.0
12	+27.339	-23.907			9	+37.113	-23.077			9	+52.772	-45.381			10	-63.361	+49.440		
10	+27.415	-0.538			9	+37.496	-48.993			9	+52.906	-0.980			10	-63.310	+9.259		
9	+57.577	-58.894			9	+37.829	-14.464			9	+53.153	-19.251			12	-62.970	+32.016	65 3238	9.7
9	+28.049	-28.653			9	+37.915	-22.309			9	+53.165	-24.332			11	-62.958	+44.294		
31	+28.369	-64.076	66 2894	8.5	10	+38.292	-39.795			9	+53.683	-56.925			9	-62.839	+23.891		
11	+28.641	-36.841			9	+38.326	-39.305			9	+53.875	-21.474			9	-62.649	+45.638		
	1021					1081					1141				11				
14	+28.870	-62.686	66 2896	9.7	9	+38.621	-31.986			9	+54.021	-26.756			10	-62.443	+38.555		
9	+28.955	-21.449			9	+38.784	-8.860			9	+54.056	-8.475			9	-62.166	+54.923		
9	+29.050	-60.959			9	+38.963	-14.418			9	+54.371	-51.698			9	-61.586	+2.086		
10	+29.424	-34.747			9	+39.258	-2.615			9	+54.388	-28.738			9	-61.180	+27.449		
18	+29.607	-58.160	66 2897	9.4	9	+40.215	-8.179			9	+54.769	-60.876			10	-59.565	+0.508		
13	+29.743	-5.523	66 2895	9.6	10	+40.726	-8.060			9	+54.866	-2.583			10	-59.111	+31.170		
9	+30.145	-32.029			11	+40.919	-64.295			9	+55.212	-41.287			11	-58.970	+38.462		
12	+30.145	-30.775			9	+41.165	-59.546			10	+55.522	-44.693			23	-58.656	+22.129	65 3240	9.4
9	+30.353	-25.774			12	+41.197	-20.339			10	+55.734	-20.310			16	-58.301	+63.900	64 3407	9.2
9	+30.361	-13.745			28	+41.255	-83.521	66 2901	8.8	9	+55.943	-14.885			37	-58.029	+53.467	65 3241	8.8
	1031					1091					1151				21				
9	+30.581	-44.404			9	+41.362	-25.221			9	+56.005	-13.249			10	-57.975	+64.801		
16	+30.662	-57.441	66 2898	9.4	9	+41.669	-59.816			9	+56.086	-47.179			10	-57.711	+8.763		
9	+31.002	-42.744			9	+41.711	-58.556			9	+56.455	-7.222			10	-57.372	+39.138		
9	+31.144	-40.210			9	+41.943	-22.007			9	+56.802	-7.148			11	-57.324	+15.355		
9	+31.220	-63.632			10	+42.330	-12.382			9	+56.868	-24.102			12	-57.104	+45.554		
13	+31.403	-38.708			9	+42.443	-19.086			9	+56.934	-4.371			9	-56.072	+1.520		
9	+31.633	-28.272			9	+42.454	-27.235			9	+57.529	-6.054			11	-56.185	+11.958		
10	+31.700	-19.617			9	+42.496	-29.154			9	+57.540	-5.038			9	-55.897	+52.413		
9	+31.774	-29.600			9	+42.524	-36.897			9	+58.269	-19.022			9	-55.542	+18.852		
9	+32.374	-61.444			9	+42.534	-43.650			9	+58.339	-56.727			14	-55.374	+39.954		
	1041					1101					1161				31				
9	+32.376	-15.576			9	+42.963	-8.273			13	+58.563	-59.899			10	-55.333	+10.908		
16	+32.589	-5.309	66 2899	9.2	9	+43.045	-5.205			9	+58.635	-19.161			10	-55.001	+32.101		
9	+32.688	-39.151			20	+43.080	-0.444	66 2902	9.1	9	+59.762	-15.829			11	-54.795	+28.982		
9	+32.876	-37.864			11	+43.400	-40.682			9	+59.773	-12.063			9	-54.777	+50.359		
13	+33.151	-27.870			15	+43.449	-62.562	66 2903	9.7	10	+60.325	-7.024			9	-54.528	+62.317		
12	+33.378	-38.388			9	+43.769	-52.931			9	+60.601	-12.403			10	-54.518	+39.813		
11	+33.579	-3.821			12	+44.161	-34.016			13	+60.734	-9.914	66 2909	9.7	9	-54.464	+17.747		
15	+33.716	-61.494	66 2900	9.4	9	+44.199	-35.765			30	+60.794	-50.770	66 2911	8.8	9	-54.463	+30.333		
9	+33.743	-43.680			30	+44.898	-6.127	66 2904	9.0	9	+60.840	-42.583			11	-53.908	+33.721		
9	+33.841	-26.406			9	+45.391	-45.280			11	+60.860	-55.695			9	-53.705	+14.138		
	1051					1111					1171				41				
9	+33.990	-8.100			12	+45.621	-7.420	66 2905	9.7	14	+60.916	-16.775	66 2910	9.7	10	-53.609	+30.639		
9	+34.006	-33.806			13	+45.965	-40.922			9	+61.188	-24.961			10	-53.540	+10.752	65 3242	9.4
9	+34.075	-31.975			9	+46.214	-44.415			9	+61.407	-53.263			12	-52.387	+51.239		
9	+34.246	-43.052			9	+46.290	-46.553			9	+61.490	-13.076			9	-52.312	+11.698		
9	+34.433	-3.895			17	+46.463	-44.040	66 2906	9.4	9	+61.856	-5.363			9	-51.786	+40.404		
9	+34.532	-54.656			9	+46.465	-25.113			9	+61.926	-8.852			10	-51.738	+2.788		
10	+34.653	-54.383			11	+47.024	-43.745			9	+62.084	-9.226			23	-51.649	+32.585	65 3243	9.2
9	+34.833	-27.530			9	+47.240	-25.868			9	+62.320	-33.951			12	-51.292	+44.360		
9	+34.839	-53.331			9	+48.066	-39.541			11	+62.499	-60.840			11	-51.262	+28.408		
9	+35.082	-25.214			9	+48.386	-14.242			9	+62.579	-18.825			9	-51.158	+32.673		
	1061					1121					1181				41				
9	+35.269	-37.727			9	+48.455	-27.683			9	+62.865	-16.329			11	-53.609	+30.639		
9	+35.362	-46.048			11	+48.549	-58.697			9	+63.136	-29.574			20	-53.540	+10.752	65 3242	9.4
9	+35.912	-12.481			13	+48.985	-41.652			9	+63.154	-10.619			12	-52.387	+51.239		
11	+35.942	-24.288			9	+49.689	-34.306			9	+63.273	-54.821			9	-52.312	+11.698		
9	+36.088	-47.009			17	+49.834	-23.775	66 2907	9.3	9	+63.358	-29.163			9	-51.786	+40.404		
9	+36.236	-22.463			9	+50.493	-39.369			9	+63.429	-5.718			11	-51.738	+2.788		
10	+36.245	-55.972			9	+51.036	-39.661			9	+63.805	-13.239			23	-51.649	+32.585	65 3243	9.2
9	+36.254	-7.299			9	+51.654	-7.341			19	+63.914	-26.862	66 2912	9.0	12	-51.292	+44.360		
9	+36.429	-13.955			9	+51.667	-57.968			11	+64.777	-16.749			11	-51.262	+28.408		
9	+36.677	-10.066			16	+52.013	-45.856	66 2908	9.4	9	+64.957	-11.310			9	-51.158	+32.673		

RECTANGULAR CO-ORDINATES.

16h 12m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
14	-51°063	+10°810			9	-39°966	+18°339			12	-30°751	+4°686			9	-19°022	+64°468		
12	-50°851	+50°605			11	-39°951	+41°700			20	-30°490	+10°675	65 3261	9°1	11	-18°551	+11°516		
11	-50°726	+20°700			9	-39°402	+39°588			13	-30°419	+0°640			11	-18°474	+17°332		
13	-49°727	+52°347	65 3246	9°6	9	-39°124	+10°812			14	-30°224	+18°351			12	-18°455	+31°847		
16	-49°726	+30°481	65 3244	9°4	10	-38°958	+13°558			12	-30°087	+18°940			10	-18°373	+58°744		
9	-49°606	+26°843			10	-38°726	+63°617			11	-29°801	+40°130			9	-18°235	+39°615		
9	-49°583	+33°653			16	-38°164	+16°467	65 3254	9°7	14	-29°734	+30°511			10	-17°911	+27°234		
9	-49°525	+45°609			12	-38°068	+18°657			9	-29°474	+56°201			17	-17°857	+56°501	65 3267	9°4
14	-49°450	+59°096			9	-37°994	+13°370			10	-29°458	+59°757			11	-17°822	+41°114		
22	-49°338	+30°263	65 3245	9°3	10	-37°943	+58°558			9	-29°094	+6°629			9	-17°705	+25°259		
	61					121					181					241			
12	-48°546	+49°008			14	-37°902	+50°321	65 3256	9°7	9	-28°820	+54°099			9	-17°675	+53°238		
28	-48°251	+11°154	65 3247	8°8	17	-37°669	+41°080	65 3255	9°4	9	-28°736	+48°258			9	-17°649	+25°107		
11	-48°235	+1°034			11	-37°642	+56°898			9	-28°716	+2°912			9	-17°507	+4°465		
21	-48°018	+46°208	65 3249	9°3	13	-37°569	+35°268			40	-28°510	+57°217	64 3426	8°6	22	-17°493	+39°367	65 3268	9°2
9	-47°590	+33°715			12	-37°475	+50°488			13	-28°409	+35°759			17	-17°247	+12°475	65 3266	9°6
20	-47°488	+19°792	65 3248	9°3	10	-37°387	+55°553			14	-28°402	+52°285	65 3262	9°6	10	-16°817	+28°199		
10	-47°468	+22°336			11	-37°119	+1°656			9	-28°294	+29°568			9	-16°562	+15°513		
11	-47°076	+39°069			13	-36°785	+59°840			15	-27°792	+27°168			12	-16°531	+28°438		
11	-47°063	+30°128			10	-36°762	+32°301			9	-27°414	+50°985			9	-16°311	+40°174		
10	-46°927	+30°969			13	-36°747	+8°670			9	-27°316	+55°419			9	-15°811	+9°162		
	71					131					191					251			
9	-46°920	+21°802			10	-36°524	+36°671			10	-27°080	+39°918			9	-15°710	+47°106		
11	-46°661	+34°929			9	-36°510	+39°548			9	-26°766	+21°828			11	-15°524	+33°903		
9	-46°645	+46°864			9	-36°469	+56°904			14	-26°624	+8°999			11	-15°247	+4°744		
10	-46°224	+22°716			10	-36°447	+11°822			11	-26°570	+58°101			11	-15°115	+37°504		
12	-46°202	+20°386			9	-36°379	+47°566			9	-26°442	+2°526			18	-15°051	+6°448	65 3269	9°6
39	-46°145	+6°433	65 3250	8°5	9	-35°869	+2°687			16	-26°105	+40°972	65 3263	9°7	9	-14°582	+0°806		
17	-46°044	+11°476	65 3251	9°6	10	-35°665	+7°649			12	-25°362	+9°059			12	-14°558	+38°741		
15	-45°926	+8°849			10	-35°586	+35°294			9	-25°293	+17°767			10	-14°351	+52°907		
9	-45°810	+47°381			12	-35°210	+51°646			9	-25°283	+27°902			9	-14°313	+20°770		
11	-45°798	+26°460			15	-34°797	+60°152	64 3421	9°6	14	-25°262	+62°522	64 3430	9°7	12	-14°012	+19°812		
	81					141					201					261			
11	-45°532	+21°078			16	-34°712	+17°987	65 3258	9°7	10	-25°003	+27°082			9	-13°624	+10°836		
9	-45°512	+28°522			15	-34°679	+20°291			9	-24°076	+48°881			9	-13°592	+35°819		
9	-45°490	+35°589			24	-34°371	+1°204	65 3257	9°0	9	-23°994	+55°149			11	-13°181	+29°602		
9	-45°450	+48°422			11	-34°137	+3°856			10	-23°920	+18°623			9	-12°767	+49°021		
10	-45°448	+34°396			12	-33°854	+42°940			9	-23°900	+21°004			11	-12°755	+19°461		
11	-45°322	+34°849			12	-33°824	+33°168			9	-23°888	+56°911			13	-12°665	+54°831		
10	-45°132	+59°280			12	-33°801	+3°400			9	-23°356	+23°586			11	-11°869	+44°934		
14	-45°073	+37°525			11	-33°769	+26°732			10	-23°047	+5°369			11	-11°363	+44°322		
14	-44°981	+12°814	65 3252	9°7	9	-33°759	+59°417			14	-23°000	+38°073	65 3264	9°7	9	-10°997	+42°201		
13	-44°791	+9°891			9	-33°670	+44°120			11	-22°402	+55°809			15	-10°913	+42°612	65 3271	9°7
	91					151					211					271			
9	-43°780	+6°333			10	-33°472	+46°930			9	-22°332	+21°696			24	-10°848	+17°002	65 3270	9°2
11	-43°702	+4°680			9	-33°322	+32°055			10	-22°302	+9°604			13	-10°515	+0°983		
9	-43°540	+46°520			9	-33°188	+30°153			10	-21°661	+55°968			11	-10°068	+25°279		
13	-43°493	+46°348			11	-33°154	+12°392			10	-21°420	+54°485			23	-9°717	+22°429	65 3272	9°1
12	-43°360	+24°401			12	-33°071	+27°132			10	-21°342	+62°626			14	-9°465	+59°504		
10	-43°225	+4°171			11	-33°050	+55°057			10	-21°196	+30°118			10	-9°005	+61°622		
20	-43°047	+60°572	64 3415	9°3	9	-32°973	+5°787			11	-21°158	+44°355			12	-8°960	+7°741		
12	-43°030	+9°173			12	-32°956	+54°418			12	-21°103	+19°110			9	-8°664	+18°583		
9	-42°871	+33°690			9	-32°689	+34°711			10	-20°728	+38°127			12	-8°588	+14°524		
34	-42°746	+7°090	65 3253	8°9	13	-32°685	+45°848			12	-20°676	+36°567			12	-8°578	+23°691		
	101					161					221					281			
9	-42°667	+19°887			10	-32°510	+63°443			10	-20°652	+37°853			17	-8°277	+26°780	65 3274	9°4
11	-42°462	+52°557			11	-32°481	+23°140			11	-20°475	+44°808			19	-7°987	+51°115	65 3275	9°2
10	-42°296	+52°532			10	-32°322	+11°042			13	-20°336	+53°265			22	-7°688	+45°991	65 3276	9°1
10	-41°902	+61°132			16	-32°246	+6°353	65 3259	9°6	9	-19°748	+43°384			12	-7°506	+18°799		
10	-41°095	+1°863			9	-32°006	+15°951			9	-19°708	+21°240			38	-7°266	+32°333	65 3277	8°4
11	-40°928	+29°397			14	-31°603	+27°394			10	-19°704	+44°743			10	-7°123	+56°102		
9	-40°565	+22°052			9	-31°553	+0°246			9	-19°692	+28°121			11	-6°943	+23°831		
9	-40°210	+51°059			9	-31°457	+0°511			11	-19°631	+52°605			9	-6°411	+37°529		
9	-40°137	+34°867			9	-31°027	+46°952			9	-19°306	+16°902			10	-6°106	+1°150		
12	-40°057	+35°931			13	-31°009	+50°548			19	-19°048	+49°560	65 3265	9°3	24	-6°017	+47°248	65 3278	9°1

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
10	- 5'823	+12'970			9	+ 6'256	+14'073			13	+19'854	+39'192			10	+34'549	+23'914		
12	- 5'656	+17'651			10	+ 6'265	+39'053			10	+20'156	+30'868			18	+34'577	+44'683	65 3301	9'6
11	- 5'532	+16'343			11	+ 8'036	+26'994			12	+20'308	+40'497			9	+34'712	+55'767		
11	- 5'357	+60'481			34	+ 8'040	+ 15'186	65 3290	8'8	12	+20'477	+54'186			9	+34'884	+ 1'440		
11	- 5'335	+24'159			10	+ 9'091	+18'203			11	+20'716	+ 2'253			11	+35'177	+13'190		
10	- 4'631	+52'984			12	+ 9'134	+21'329			15	+21'274	+39'968			11	+35'364	+30'850		
12	- 4'605	+47'710	65 3279	9'6	13	+ 9'162	+ 3'584			9	+21'504	+30'222			10	+35'603	+ 8'339		
18	- 3'692	+35'049	65 3280	9'4	10	+ 9'299	+ 6'639			10	+21'649	+48'653			11	+35'815	+35'994		
18	- 3'609	+34'052	65 3281	9'3	10	+ 9'764	+60'962			9	+22'443	+ 1'566			14	+36'191	+32'484		
10	- 3'161	+37'381			13	+10'162	+31'942			9	+22'466	+56'085			9	+36'282	+15'569		
	301					361					421					481			
10	- 2'879	+40'620			9	+10'226	+10'318			9	+22'485	+53'289			11	+36'560	+57'302		
10	- 2'765	+19'261			13	+10'300	+25'313			9	+22'558	+37'258			9	+36'863	+44'019		
9	- 2'661	+26'161			17	+10'350	+51'808	65 3291	9'7	11	+22'671	+18'959			11	+36'864	+38'285		
13	- 2'650	+40'682	65 3282	9'7	10	+10'722	+ 6'606			10	+22'798	+61'213			18	+37'978	+18'817	65 3303	9'7
10	- 2'412	+10'978			10	+10'994	+48'745			12	+23'591	+43'548			10	+37'982	+54'914		
9	- 2'387	+27'912			13	+11'194	+53'424			10	+23'921	+ 6'365	65 3296	9'3	10	+38'232	+42'044		
11	- 2'284	+51'353			11	+11'314	+39'696			19	+23'984	+34'108			22	+38'272	+ 0'207	65 3305	9'2
12	- 2'266	+18'113			13	+11'477	+ 8'697			10	+24'268	+30'388			10	+38'294	+ 7'383		
10	- 1'711	+41'627			10	+11'727	+40'397			10	+24'371	+46'760			11	+38'351	+35'890		
26	- 1'693	+23'027	65 3284	9'0	9	+11'783	+54'679			10	+24'426	+29'515			12	+38'491	+13'562		
	311					371					431					491			
11	- 1'545	+37'313			9	+12'031	+36'112			9	+24'613	+49'398			38	+38'727	+28'955	65 3304	8'6
16	- 1'336	+42'416			11	+12'092	+36'579			9	+24'793	+53'584			9	+39'181	+29'261		
10	- 1'073	+15'035			10	+12'411	+22'085			11	+24'841	+50'728			9	+39'379	+31'824		
10	- 0'324	+54'757			15	+12'556	+26'349	65 3292	9'6	10	+25'041	+57'576			9	+39'452	+34'244		
10	- 0'236	+56'189			14	+12'653	+62'525	64 3466	9'7	10	+26'040	+31'384			9	+39'745	+54'552		
15	- 0'163	+60'315	64 3453	9'7	9	+13'122	+27'025			9	+26'046	+29'702			11	+39'948	+17'644		
11	- 0'083	+12'161			9	+13'204	+38'170			10	+26'619	+24'295			10	+39'955	+48'526		
18	+ 0'120	+55'863	65 3285	9'3	20	+13'330	+62'027	64 3468	9'3	10	+26'625	+37'461			10	+39'959	+29'265		
12	+ 0'134	+28'335			9	+13'429	+58'769			10	+26'921	+44'090			15	+40'136	+34'510	65 3306	9'7
19	+ 0'738	+31'721	65 3286	9'3	11	+13'539	+44'909			11	+26'080	+59'118			10	+40'280	+54'678		
	321					381					441					501			
10	+ 0'800	+ 1'320			10	+13'546	+38'520			12	+27'862	+63'557			11	+40'361	+52'216		
10	+ 1'095	+39'179			10	+13'656	+20'319			10	+27'970	+33'338			11	+40'556	+28'855		
11	+ 1'364	+33'589			36	+13'663	+ 3'818	65 3293	9'0	10	+28'856	+62'625			10	+40'969	+56'890		
9	+ 1'377	+31'921			9	+14'038	+26'056			11	+29'187	+35'302			20	+41'683	+61'111	64 3489	9'3
9	+ 1'388	+57'677			11	+14'091	+49'953			9	+29'664	+58'152			11	+41'913	+34'333		
9	+ 1'409	+49'480			9	+14'771	+53'780			10	+30'084	+31'816			10	+42'214	+21'287		
9	+ 1'563	+19'086			11	+15'047	+35'661			12	+30'221	+46'279			11	+42'216	+21'891		
20	+ 1'864	+45'526	65 3287	9'2	9	+15'089	+ 6'152			17	+30'337	+48'606	65 3297	9'3	11	+42'245	+25'403		
9	+ 1'870	+16'350			10	+15'160	+47'304			14	+30'607	+43'932			12	+42'302	+24'749		
10	+ 1'934	+20'851			9	+15'204	+52'387			10	+30'647	+42'136			10	+42'785	+ 6'027		
	331					391					451					511			
9	+ 1'988	+44'902			9	+15'672	+39'008			9	+30'903	+42'566			11	+42'921	+37'016		
10	+ 2'214	+50'131			15	+15'788	+41'627			12	+31'008	+50'365			9	+43'001	+ 4'007		
10	+ 3'241	+14'386			9	+15'831	+25'407			10	+31'067	+12'330			11	+43'125	+16'858		
20	+ 3'326	+28'233	65 3288	9'3	10	+16'217	+ 9'754			12	+31'442	+ 1'253			13	+43'194	+19'026		
10	+ 3'366	+52'295			17	+16'317	+10'419	65 3294	9'7	9	+31'478	+ 9'470			9	+43'759	+36'730		
11	+ 3'462	+ 4'350			12	+16'519	+39'286			9	+31'692	+25'849			19	+43'812	+30'473	65 3308	9'3
24	+ 3'565	+40'733	65 3289	9'3	13	+16'819	+54'226			11	+31'787	+ 9'581			14	+43'851	+54'857	65 3307	9'7
9	+ 3'945	+38'627			18	+17'304	+63'205	64 3474	9'3	19	+32'084	+42'234	65 3298	9'4	9	+43'887	+42'096		
14	+ 4'446	+40'230			9	+17'346	+48'509			14	+32'532	+56'065			10	+44'573	+ 4'119		
10	+ 4'727	+10'794			11	+17'967	+23'399			18	+32'699	+40'411	65 3299	9'6	13	+44'649	+28'396		
	341					401					461					521			
9	+ 4'791	+38'643			11	+18'572	+51'968			12	+32'770	+34'993			10	+45'267	+19'624		
11	+ 4'809	+40'566			14	+18'626	+23'374			9	+32'871	+23'476			9	+45'267	+41'328		
9	+ 5'113	+28'448			11	+18'705	+33'866			11	+32'916	+30'307			12	+45'397	+21'681		
14	+ 5'164	+61'151			14	+18'846	+62'836			11	+33'202	+63'731			9	+45'521	+40'100		
9	+ 5'629	+38'146			11	+18'888	+18'372			9	+33'788	+30'198			11	+45'975	+15'988		
12	+ 5'630	+53'780			38	+ 18'896	+ 31'088	65 3295	8'5	10	+33'818	+36'758			22	+46'175	+39'397	65 3309	9'2
13	+ 5'854	+10'247			12	+19'069	+26'284			18	+33'913	+51'688	65 3300	9'4	11	+46'266	+12'564		
13	+ 6'059	+53'099			11	+19'090	+36'020			11	+34'182	+ 4'168			9	+46'641	+44'257		
11	+ 6'124	+ 6'745			11	+19'136	+51'054			38	+34'242	+26'011	65 3302	8'5	9	+46'787	+24'329		
15	+ 6'224	+ 0'626			11	+19'427	+ 2'059			12	+34'412	+ 9'869			11	+46'862	+13'329		

RECTANGULAR CO-ORDINATES.

16^h 12^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531,					591,					651,					711,			
9	+48°515	+23°282			9	+62°794	+38°035			9	-47°596	-5°205			14	-34°999	-18°401		
9	+48°636	+12°745			34	+63°141	+59°650	64 3503	8'4	11	-47°510	-10°110			14	-34°970	-34°373		
9	+48°642	+60°491			15	+63°288	+59°807			11	-47°502	-42°164			12	-34°967	-13°233		
10	+48°745	+8°937			10	+63°849	+11°375			9	-47°490	-18°332			15	-34°890	-28°832		
9	+49°093	+45°698			9	+64°073	+46°862			40	-46°938	-50°336	66 2911	8'8	14	-34°6'7	-42°303		
9	+49°216	+20°002			9	+64°237	+25°612			12	-46°680	-12°670			10	-34°385	-41°759		
13	+49°337	+40°480			10	+64°322	+50°179			9	-46°637	-33°440			21	-34°260	-54°453	66 2917	9'5
9	+49°339	+26°481			9	+64°334	+19°636			12	-46°534	-55°253			9	-34°223	-17°956		
9	+49°535	+51°412			10	+64°353	+1°742			11	-46°173	-52°774			9	-33°939	-45°375		
14	+49°658	+43°962			10	+64°990	+2°135			9	-46°158	-29°008			10	-33°230	-54°676		
10	+49°784	+25°449			14	-64°779	-34°833			10	-45°658	-10°706			12	-33°172	-38°395		
9	+49°827	+7°287			18	-63°919	-61°333	66 2902	9'1	22	-45°570 -26°256		66 2912	9'0	10	-33°169	-1°404		
12	+50°042	+20°537			11	-63°413	-63°357	66 2903	9'7	15	-45°444	-16°106			10	-33°110	-47°613		
9	+50°216	+48°950			10	-63°103	-25°802			10	-45°331	-4°469			11	-32°852	-2°078		
20	+50°887	+1°569	65 3310	9'3	13	-62°454	-41°600			10	-45°197	-15°926			10	-32°442	-46°491		
10	+51°549	+48°809			9	-62°271	-26°477			11	-44°540	-25°099			9	-32°279	-17°673		
10	+51°878	+40°176			10	-61°992	-14°794			13	-44°522	-60°247			14	-32°152	-22°865		
14	+51°972	+59°668	64 3494	9'4	15	-61°744	-44°668	66 2906	9'4	10	-44°197	-54°173			20	-31°816	-51°047	66 2918	9'2
42	+52°187	+9°619	65 3311	8'0	11	-61°203	-44°322			10	-44°118	-24°693			12	-31°548	-30°061		
13	+52°255	+46°087			9	-60°477	-40°074			9	-43°703	-13°854			10	-31°474	-19°812		
15	+52°333	+9°401			18	-59°860	-24°197	66 2907	9'3	10	-43°377	-11°824			9	-31°156	-50°792		
10	+52°397	+52°676			12	-59°415	-42°107			10	-42°629	-41°605			11	-31°012	-30°963		
13	+52°470	+47°650			10	-59°220	-7°673			9	-41°799	-21°346			9	-30°983	-27°510		
10	+52°617	+25°641			12	-58°613	-59°111			10	-41°708	-24°808			19	-30°858	-2°653	65 3260	9'3
10	+52°783	+23°631			9	-58°503	-59°167			9	-41°685	-44°476			9	-30°749	-16°227		
0	+53°133	+8°430			10	-58°434	-1°238			15	-41°556	-64°419	66 2913	9'6	13	-30°366	-57°409		
16	+53°611	+2°459			11	-58°162	-7°107			18	-41°327	-44°855	66 2914	9'4	13	-29°976	-5°268		
9	+53°676	+4°177			11	-58°068	-39°710			10	-41°024	-44°371			10	-29°798	-13°902		
12	+54°430	+17°388			15	-57°021	-29°108			12	-40°893	-39°302			11	-28°670	-48°188		
9	+54°795	+27°024			11	-56°752	-8°641			9	-40°810	-21°111			9	-28°596	-20°123		
15	+54°891	+50°782	65 3312	9'7	9	-56°496	-24°513			10	-40°412	-26°804			9	-28°329	-9°724		
10	+54°919	+41°934			9	-56°350	-2°698			11	-40°245	-27°369			13	-28°263	-50°275		
11	+55°056	+26°703			18	-56°063	-46°078	66 2908	9'4	12	-40°117	-22°264			12	-28°197	-2°324		
9	+55°182	+22°562			10	-55°982	-21°608			11	-39°727	-1°696			9	-28°015	-31°048		
10	+55°208	+24°879			11	-54°462	-13°250			11	-39°150	-9°247			10	-27°533	-22°515		
9	+55°373	+24°439			11	-54°438	-7°205			15	-39°104	-45°821			9	-27°403	-33°546		
12	+55°782	+34°692			10	-54°403	-14°880			11	-39°013	-40°891			35	-27°399	-60°494	66 2919	8'8
10	+56°081	+28°011			12	-54°200	-20°328			11	-38°501	-11°320			9	-27°031	-30°306		
38	+56°125	+17°396	65 3313	8'5	11	-54°180	-4°327			10	-38°214	-38°108			9	-26°733	-5°739		
11	+56°206	+51°518			11	-54°109	-7°101			14	-38°196	-48°741			35	-26°464 -5°481		66 2920	8'8
10	+56°280	+29°543			9	-53°538	-4°951			11	-38°160	-2°241			13	-26°142	-19°498		
16	+56°650	+10°917	65 3315	9'5	11	-53°451	-5°961			10	-38°158	-16°078			9	-25°980	-25°299		
13	+56°735	+18°926	65 3314	9'7	9	-53°272	-51°721			12	-37°638	-34°197			10	-25°828	-38°775		
12	+57°797	+62°935	64 3499	9'6	9	-53°210	-41°293			11	-37°618	-40°177			9	-25°752	-30°707		
11	+57°998	+2°117			9	-52°813	-24°017			11	-37°516	-53°520			9	-25°689	-4°410		
11	+58°526	+29°801			12	-52°670	-44°653			10	-37°280	-55°100			16	-25°465	-0°258		
9	+58°612	+49°421			12	-51°786	-18°836			10	-37°234	-14°515			10	-25°256	-43°018		
11	+58°619	+42°156			9	-51°396	-18°952			17	-37°203	-44°818	66 2915	9'6	11	-25°107	-2°492		
11	+58°675	+47°422			12	-50°593	-6°733			9	-36°871	-46°263			10	-24°932	-14°555		
30	+59°091	+36°467	65 3316	9'0	9	-50°532	-15°559			11	-36°783	-10°589			12	-24°874	-5°536		
10	+59°202	+8°414			9	-50°121	-42°045			9	-36°709	-47°996			16	-24°252	-5°116	66 2921	9'7
9	+59°757	+23°914			17	-49°972	-9°567	66 2909	9'7	10	-36°561	-46°987			10	-23°960	-26°972		
10	+60°154	+50°036			11	-49°934	-12°076			12	-36°525	-5°773			11	-23°942	-47°256		
9	+60°225	+11°235			17	-49°292	-16°423	66 2910	9'7	9	-36°240	-11°476			10	-23°036	-41°562		
17	+60°269	+34°155	65 3317	9'5	11	-49°187	-4°957			11	-36°022	-23°203			11	-22°954	-47°710		
11	+60°519	+62°052			9	-48°968	-56°439			14	-35°598	-34°021			11	-22°455	-43°760		
9	+61°242	+53°988			10	-48°829	-8°385			22	-35°493 -31°409		66 2916	9'2	9	-22°451	-2°507		
10	+61°339	+18°832			9	-48°690	-8°791			12	-35°385	-55°792			10	-22°220	-40°111		
9	+61°738	+19°820			13	-48°530	-59°591			12	-35°311	-42°998			9	-21°984	-45°886		
9	+62°645	+46°473			11	-48°444	-24°587			12	-35°103	-44°953			9	-21°620	-26°232		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	771,					831,					891,					951,			
12	-21°578	-19°197	66 2922	9.2	10	-8°905	-0°978	66 2928	9.2	9	+1°251	-61°932	66 2933	9.3	11	+13°287	-23°073	66 2944	9.6
12	-21°563	-11°960			9	-8°602	-25°242			9	+1°901	-30°457			9	+13°553	-13°228		
22	-21°455	-14°906			9	-8°586	-26°454			22	+1°978	-62°681			9	+13°612	-38°644		
10	-20°993	-57°969			20	-8°332	-18°482			22	+1°991	-16°836			9	+13°665	-20°805		
10	-20°653	-48°967			11	-8°249	-53°227			10	+2°705	-52°405			12	+13°902	-4°688		
13	-20°476	-16°321	66 2924	9.7	10	-8°242	-30°201	66 2928	9.2	11	+3°127	-28°844	66 2935	9.3	9	+14°200	-38°357	66 2945	9.6
10	-20°464	-25°236			9	-7°777	-29°022			16	+3°184	-26°436			16	+14°914	-37°727		
10	-20°420	-24°524			9	-7°653	-37°980			12	+3°214	-17°414			12	+14°940	-29°018		
11	-19°689	-61°882			11	-7°464	-9°524			9	+3°302	-39°403			9	+15°103	-27°144		
9	-19°360	-9°166			11	-7°317	-40°108			9	+3°718	-45°091			10	+15°286	-45°871		
	781					841					901					961			
11	-19°156	-5°075	66 2923	9.0	11	-7°174	-8°632	66 2928	9.2	9	+3°923	-5°811	66 2936	9.3	21	+15°487	-16°904	66 2946	9.7
10	-18°952	-48°272			13	-7°152	-22°083			9	+4°240	-48°047			11	+15°745	-41°093		
11	-18°306	-52°717			11	-7°056	-23°288			11	+4°003	-24°621			10	+16°579	-17°698		
9	-18°232	-3°547			10	-6°731	-50°771			10	+4°004	-23°499			11	+16°818	-20°447		
11	-18°078	-17°571			9	-6°657	-37°451			14	+4°945	-45°581			11	+17°793	-13°946		
18	-18°075	-46°290	66 2924	9.7	10	-6°543	-36°565	66 2928	9.2	15	+5°064	-45°503	66 2935	9.3	9	+17°835	-38°384	66 2946	9.7
30	-18°040	-52°510			9	-6°457	-1°254			20	+5°112	-38°105			9	+17°902	-25°108		
9	-17°995	-40°414			11	-6°197	-59°732			11	+5°411	-1°774			12	+18°084	-26°754		
9	-17°928	-5°274			9	-6°148	-26°140			9	+5°442	-9°583			9	+18°762	-47°897		
9	-17°703	-59°301			9	-5°864	-27°700			12	+5°518	-20°707			10	+19°078	-54°727		
	791					851					911					971			
12	-17°394	-38°912	66 2925	9.7	15	-5°735	-38°631	66 2929	9.2	17	+5°873	-42°397	66 2937	9.6	9	+19°166	-64°009	66 2947	9.3
13	-16°926	-38°951			10	-5°322	-17°960			18	+5°878	-18°098			10	+19°491	-29°546		
10	-16°837	-12°037			12	-5°050	-13°064			15	+6°021	-64°807			13	+19°824	-8°995		
9	-16°720	-44°018			10	-4°852	-38°509			16	+6°181	-4°258			9	+19°887	-36°602		
9	-16°585	-31°635			11	-4°419	-39°545			11	+6°213	-41°906			10	+20°243	-24°879		
9	-16°391	-34°123	66 2926	9.6	10	-4°359	-33°679	66 2930	9.7	17	+6°315	-7°005	66 2939	9.7	11	+20°417	-38°355	66 2948	9.0
9	-16°200	-3°167			12	-4°096	-43°910			56	+6°504	-89°321			10	+20°755	-18°668		
15	-16°148	-36°285			11	-4°077	-34°566			9	+6°619	-33°249			10	+20°970	-1°670		
15	-15°980	-61°280			12	-3°975	-30°186			9	+6°853	-48°531			9	+21°254	-52°067		
13	-15°855	-54°676			9	-3°938	-12°102			13	+6°882	-50°688			23	+21°548	-14°334		
	801					861					921					981			
15	-15°740	-18°972	66 2926	9.6	9	-3°878	-53°004	66 2929	9.2	9	+7°106	-12°949	66 2941	8.8	0	+21°551	-40°385	66 2949	8.6
13	-15°149	-33°509			9	-3°758	-63°903			9	+7°141	-42°206			2	+21°590	-48°853		
10	-15°112	-3°499			10	-3°685	-25°251			9	+7°333	-45°375			14	+21°690	-12°829		
10	-14°907	-1°282			14	-3°574	-48°982			11	+7°342	-23°181			13	+22°019	-36°752		
9	-14°610	-34°427			9	-3°505	-32°532			11	+7°392	-20°884			9	+22°057	-59°666		
24	-14°487	-35°882	66 2927	9.2	11	-3°485	-36°109	66 2929	9.2	9	+7°521	-47°767	66 2942	9.3	10	+22°313	-21°898	66 2950	9.7
11	-14°483	-20°534			11	-3°183	-52°216			12	+7°607	-9°315			9	+22°488	-25°462		
9	-14°242	-34°356			9	-2°850	-24°221			28	+7°610	-39°517			10	+22°677	-20°156		
9	-14°126	-37°883			12	-2°626	-13°720			10	+7°744	-60°773			9	+22°792	-51°827		
10	-13°798	-14°263			22	-2°578	-33°742			10	+7°933	-6°587			11	+23°308	-27°379		
	811					871					931					991			
10	-13°615	-18°219	66 2927	9.2	9	-2°481	-0°064	66 2930	9.7	13	+8°022	-54°107	66 2942	9.3	12	+23°373	-4°737	66 2949	8.6
9	-13°595	-58°276			9	-2°409	-18°581			10	+8°585	-5°497			9	+23°525	-2°186		
10	-13°418	-37°031			9	-2°284	-56°157			9	+9°434	-8°899			34	+23°778	-27°945		
9	-13°393	-51°224			11	-2°246	-46°579			10	+9°684	-53°595			18	+24°022	-33°730		
9	-13°209	-35°439			12	-2°065	-8°910			11	+10°228	-34°345			10	+24°471	-40°412		
12	-12°479	-43°374	66 2927	9.2	30	-1°818	-3°550	66 2931	9.1	9	+10°315	-6°981	66 2943	9.1	10	+25°291	-57°438	66 2951	9.1
11	-12°217	-28°247			9	-1°774	-35°835			15	+10°531	-11°548			9	+25°499	-28°726		
11	-11°663	-6°272			13	-1°508	-4°846			10	+11°017	-25°934			11	+25°555	-10°624		
11	-11°612	-14°964			9	-1°479	-20°082			9	+11°310	-48°937			11	+26°007	-32°717		
12	-11°441	-40°626			11	-1°308	-4°702			20	+11°376	-54°787			10	+26°126	-45°579		
	821					881					941					1001			
14	-10°962	-50°692	66 2927	9.2	9	-1°272	-22°797	66 2932	9.3	12	+11°492	-48°054	66 2943	9.1	10	+26°732	-23°728	66 2951	9.1
11	-10°592	-26°327			11	-1°094	-50°307			24	+11°947	-26°892			9	+26°755	-40°779		
14	-10°320	-14°236			9	-0°928	-20°099			12	+11°978	-34°393			9	+26°810	-7°029		
10	-9°727	-17°726			22	-0°822	-47°122			10	+12°031	-42°319			22	+26°840	-16°182		
9	-9°545	-22°773			9	-0°764	-36°497			9	+12°055	-23°122			12	+27°451	-38°100		
9	-9°422	-5°414	65 3273	9.2	21	-0°442	-18°722	66 2932	9.3	9	+12°223	-51°503	66 2943	9.1	9	+27°621	-4°010	66 2951	9.1
22	-9°394	-1°718			10	+0°114	-46°980			14	+12°438	-60°201			9	+27°648	-27°150		
9	-9°114	-23°301			11	+0°387	-48°418			12	+12°580	-13°726			11	+28°401	-22°839		
9	-9°022	-30°587			12	+0°928	-10°307			13	+12°867	-31°881			12	+28°512	-48°747		
9	-8°993	-58°312			11	+1°183	-7°373			12	+13°200	-47°104			13	+28°671	-40°090		

16^h 30^m, - 66°

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Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51					111					171					231			
9	-51°513	+11°416			9	-31°414	+26°999			10	-10°507	+56°145			9	+12°120	+38°750		
9	-50°938	+19°063			9	-31°279	+29°581			13	-9°877	+41°313	65 3339	9°6	9	+12°324	+6°109		
9	-50°844	+38°316			50	-31°230	+11°680	65 3324	7°4	19	-9°853	+56°015	65 3340	9°5	10	+12°399	+39°698		
9	-50°246	+62°243			12	-31°185	+23°397			9	-9°290	+30°190			9	+12°682	+8°577		
9	-50°206	+47°192			12	-30°991	+61°976			9	-8°527	+18°329			9	+12°761	+44°206		
9	-50°181	+50°525			15	-30°807	+33°529	65 3326	9°6	25	-7°054	+33°311	65 3341	8°9	9	+12°938	+23°261		
14	-50°134	+63°979	64 3504	9°4	9	-30°717	+48°790			9	-7°496	+1°220			9	+14°237	+10°509		
10	-49°462	+53°263			9	-30°608	+7°193			9	-7°443	+31°877			9	+14°288	+36°148		
20	-49°120	+62°608	64 3506	9°2	9	-30°448	+47°382			9	-7°266	+31°777			12	+14°691	+64°765		
9	-48°516	+26°037			42	-30°431	+20°031	65 3327	8°4	10	-7°136	+39°001			10	+15°146	+56°476		
	81					121					181					241			
9	-48°486	+55°799			10	-29°921	+32°593			9	-7°041	+0°655			9	+15°735	+37°326		
10	-48°143	+39°495			25	-29°687	+15°163	65 3328	9°0	34	-6°903	+51°319	65 3342	8°5	9	+16°273	+15°126		
9	-47°907	+11°816			9	-29°533	+11°233			9	-6°732	+14°746			11	+16°409	+41°969		
12	-47°156	+52°417			14	-29°096	+64°878	64 3517	9°7	9	-6°337	+61°050			9	+16°449	+31°572		
9	-47°093	+18°697			9	-28°604	+0°273			9	-5°838	+27°384			11	+16°958	+58°354		
9	-46°958	+48°047			9	-28°407	+49°382			9	-5°473	+17°087			9	+17°123	+4°492		
9	-46°717	+2°244			11	-28°310	+25°736			9	-5°409	+18°473			25	+18°443	+47°290	65 3349	8°9
9	-46°614	+11°076			18	-28°223	+30°431	65 3329	9°2	9	-5°031	+3°884			11	+18°524	+25°180		
10	-46°389	+15°749			11	-27°002	+52°350			9	-4°031	+32°175			9	+19°148	+45°572		
9	-46°326	+16°587			10	-26°443	+27°981			10	-3°218	+42°508			10	+19°434	+11°731		
	71					131					191					251			
9	-46°117	+2°676			9	-26°421	+39°466			11	-2°610	+8°962			9	+19°605	+23°714		
22	-45°830	+20°796	65 3318	9°0	9	-26°235	+59°565			9	-2°561	+35°193			9	+20°707	+59°907		
12	-45°488	+56°017			9	-26°088	+56°591			12	-2°203	+38°675	65 3343	9°7	10	+20°802	+38°380		
12	-44°886	+24°458			22	-26°036	+20°031	65 3330	9°2	9	-1°966	+2°008			12	+20°827	+17°694	65 3350	9°5
11	-44°607	+46°786			9	-25°673	+40°718			11	-1°718	+19°267			9	+20°975	+1°890		
10	-44°519	+27°336			12	-25°590	+58°915	64 3519	9°7	9	-1°349	+33°583			9	+21°674	+31°524		
10	-43°499	+64°121			9	-24°691	+55°744			32	-0°582	+17°947	65 3344	8°6	10	+21°686	+38°721		
10	-43°381	+38°371			53	-24°621	+43°168	65 3331	7°0	9	-0°301	+33°066			9	+21°700	+51°988		
11	-43°108	+27°345			10	-24°428	+51°875			11	+1°226	+62°627			9	+21°739	+61°727		
9	-43°071	+30°561			9	-23°496	+1°626			10	+1°285	+41°652			14	+22°685	+63°609	64 3546	9°7
	81					141					201					261			
11	-43°053	+25°460			9	-22°355	+15°502			11	+1°832	+48°050			9	+23°097	+7°565		
9	-42°786	+19°551			12	-22°210	+52°860			9	+1°840	+60°341			12	+23°757	+63°251		
12	-41°462	+19°924			9	-22°118	+27°713			9	+1°998	+7°619			11	+23°961	+21°371		
9	-41°330	+4°973			12	-21°886	+48°961	65 3332	9°7	9	+2°008	+44°391			9	+25°063	+32°247		
9	-41°084	+6°607			9	-21°825	+60°105			9	+3°013	+30°395			9	+25°291	+39°062		
28	-40°708	+15°846	65 3319	9°0	9	-21°189	+44°113			9	+3°107	+16°262			9	+25°298	+63°991		
9	-39°959	+20°867			11	-21°022	+5°186			9	+3°396	+52°851			9	+25°363	+23°027		
26	-39°742	+49°956	65 3320	8°8	26	-20°526	+23°008	65 3333	9°0	9	+3°669	+49°778			9	+26°144	+26°204		
11	-39°496	+39°771			9	-20°320	+8°570			9	+4°365	+18°665			18	+26°152	+33°089	65 3351	9°5
9	-38°864	+55°208			9	-19°877	+56°939			9	+4°568	+19°208			10	+26°634	+48°376		
	91					151					211					271			
11	-38°328	+40°028			10	-19°167	+9°760			28	+4°626	+16°955	65 3345	9°0	9	+28°797	+58°094		
10	-38°207	+33°089			11	-18°952	+19°688			9	+5°410	+53°315			9	+28°859	+35°767		
13	-38°102	+60°008	64 3513	9°5	36	-17°373	+37°407	65 3335	8°2	11	+6°157	+9°199			9	+29°507	+59°406		
9	-36°965	+51°183			10	-17°338	+49°910			9	+6°356	+55°601			9	+30°210	+64°389		
9	-36°952	+48°048			14	-17°201	+21°070	65 3334	9°5	9	+6°753	+49°183			9	+30°328	+8°236		
9	-36°733	+20°108			12	-16°441	+40°148	65 3336	9°7	36	+6°825	+16°437	65 3346	8°5	13	+30°894	+63°363	64 3550	9°5
9	-35°926	+43°225			13	-16°363	+15°082			9	+6°927	+24°299			10	+30°992	+7°932		
13	-35°876	+2°070	65 3321	9°7	9	-15°483	+33°105			42	+7°475	+45°698	65 3347	8°1	9	+31°352	+17°530		
9	-35°131	+56°950			12	-15°481	+50°178			12	+8°019	+58°717			9	+31°898	+21°897		
9	-34°979	+53°868			22	-15°291	+22°564	65 3337	9°0	9	+8°050	+55°605			11	+32°164	+12°395		
	101					161					221					281			
10	-34°282	+61°801			9	-14°869	+20°649			10	+8°661	+12°420			12	+32°177	+35°360		
14	-33°734	+30°788	65 3322	9°7	20	-13°918	+63°467	64 3528	9°2	9	+9°421	+22°514			9	+32°251	+48°312		
12	-33°436	+27°568			18	-13°515	+54°737	65 3338	9°2	16	+10°364	+0°784	65 3348	9°5	16	+33°325	+31°717	65 3352	9°7
9	-33°413	+28°862			9	-13°356	+28°942			9	+10°600	+13°045			36	+33°377	+18°731	65 3353	8°6
9	-33°172	+17°559			9	-12°872	+53°589			9	+11°261	+62°958			9	+33°402	+49°456		
12	-33°116	+42°722	65 3323	9°7	9	-12°201	+3°313			10	+11°446	+64°331			10	+33°650	+20°665		
10	-32°802	+22°418			11	-11°527	+9°471			9	+11°499	+51°874			11	+33°883	+35°829		
9	-32°643	+64°438			9	-11°362	+6°540			9	+11°523	+41°199			11	+34°182	+52°166		
9	-32°257	+60°155			10	-11°265	+3°650			9	+11°687	+63°773			12	+34°862	+49°224		
10	-31°539	+49°254			9	-11°220	+60°858			9	+11°743	+53°518			9	+35°356	+53°096		

RECTANGULAR CO-ORDINATES.

16^h 30^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291,					351,					411,					471,			
16	+35°578	+60°381	64 3552	9°5	9	+54°610	+60°229			9	-54°348	-64°950			10	-34°749	-28°856		
10	+36°276	+3°356			9	+54°698	+9°614			9	-54°162	-63°424			9	-34°291	-49°847		
11	+36°856	+15°947	65 3354	9°7	11	+54°911	+59°004			16	-54°124	-33°189	66 2966	9°3	9	-33°318	-26°055		
16	+37°214	+27°627	65 3355	9°5	9	+56°017	+18°074			9	-54°122	-50°901			9	-31°765	-16°161		
18	+37°344	+17°555	65 3357	9°2	9	+56°073	+5°914			12	-54°112	-44°803			9	-31°519	-26°716		
9	+37°531	+5°715			11	+56°101	+13°959			9	-54°045	-30°907			11	-31°336	-21°037		
9	+38°195	+46°708			12	+56°461	+0°221			9	-53°860	-53°444			9	-30°677	-56°411		
30	+38°251	+40°680	65 3358	8°6	9	+56°921	+12°847			18	-53°716	-34°989	66 2967	9°2	9	-30°234	-34°310		
10	+38°674	+12°392			13	+57°042	+3°237			22	-53°558	-31°093	66 2968	9°1	28	-30°170	-2°242	65 3325	8°9
11	+38°715	+33°700			9	+57°236	+10°658			9	-53°462	-0°021			10	-30°160	-21°522		
	301					361					421					481			
11	+38°773	+43°199			9	+57°427	+18°594			9	-53°097	-44°971			9	-29°781	-2°114		
12	+39°048	+53°622			9	+57°769	+7°254			9	-52°524	-41°887			12	-29°468	-29°254		
11	+39°113	+50°228			9	+57°883	+18°469			9	-52°360	-17°313			9	-29°381	-37°528		
10	+39°302	+62°749			11	+57°943	+19°704			9	-51°765	-3°273			9	-29°350	-29°035		
9	+39°448	+49°064			15	+58°352	+53°398	65 3360	9°7	9	-51°202	-2°819			10	-28°564	-41°319		
9	+39°731	+26°951			9	+58°384	+13°967			11	-51°201	-48°830			9	-28°253	-54°894		
9	+40°523	+34°273			12	+58°636	+4°331			9	-50°963	-2°621			9	-27°424	-29°632		
9	+41°016	+46°468			9	+58°740	+50°096			12	-50°778	-33°077	66 2969	9°7	22	-27°408	-44°398	66 2976	9°2
9	+41°051	+40°664			9	+58°772	+4°653			9	-50°629	-7°735			9	-27°116	-26°692		
10	+41°484	+30°866			9	+59°299	+10°128			9	-50°522	-45°058			9	-26°632	-48°681		
	311					371					431					491			
9	+41°980	+15°325			9	+59°969	+57°224			11	-50°447	-27°542			9	-26°597	-5°965		
9	+42°181	+59°772			9	+61°296	+37°019			9	-50°313	-37°422			24	-26°517	-55°044	66 2977	9°0
10	+42°504	+36°167			10	+61°417	+31°899			11	-49°708	-13°302			9	-26°362	-28°998		
12	+43°085	+34°449			10	+61°472	+15°303			32	-49°461	-50°349	66 2970	8°8	11	-26°289	-51°367		
11	+43°195	+1°375			9	+62°197	+25°725			9	-49°272	-19°126			11	-25°825	-13°655		
9	+43°525	+43°152			10	+62°408	+11°942			9	-48°998	-10°812			11	-25°618	-26°681		
11	+43°609	+29°980			9	+62°677	+9°519			9	-48°695	-35°392			9	-25°262	-37°739		
10	+43°848	+13°426			16	+62°996	+0°086	65 3361	9°7	30	-48°357	-61°217	66 2971	9°1	24	-25°074	-55°880	66 2978	8°7
9	+44°018	+43°887			9	+63°481	+6°392			9	-47°910	-41°511			13	-25°053	-6°074	66 2979	9°7
9	+44°357	+32°740			11	+63°501	+25°157			9	-47°297	-0°281			9	-24°768	-28°967		
	321					381					441					501			
9	+44°388	+42°272			9	+63°747	+25°029			9	-47°205	-47°797			9	-24°642	-62°629		
9	+44°568	+14°154			9	+64°016	+63°011			9	-46°661	-48°195			11	-23°985	-9°836		
12	+44°741	+57°416			9	+64°565	+30°744			9	-45°778	-58°441			10	-23°605	-2°894		
9	+45°046	+0°759			9	-63°868	-18°402			26	-45°657	-49°424	66 2972	9°0	10	-23°435	-4°012		
11	+45°120	+21°804			9	-63°630	-10°646			9	-45°232	-37°586			9	-22°876	-28°756		
11	+45°611	+3°677			10	-62°823	-17°072			11	-44°142	-2°555			9	-22°816	-42°704		
11	+45°790	+4°398			19	-62°522	-60°323	66 2960	9°3	9	-43°544	-11°467			9	-22°417	-36°861		
9	+45°833	+11°609			9	-61°983	-4°155			9	-43°393	-0°349			9	-22°405	-56°567		
10	+46°538	+41°352			9	-61°269	-16°290			9	-42°638	-12°616			10	-22°226	-30°247		
10	+46°554	+25°845			10	-61°223	-47°120			9	-42°439	-44°065			9	-21°840	-31°789		
	331					391					451					511			
10	+46°561	+44°140			9	-61°192	-40°986			12	-42°420	-26°458			9	-21°520	-28°098		
10	+46°707	+56°136			16	-59°849	-40°487	66 2961	9°6	11	-41°956	-55°594			9	-21°461	-24°700		
9	+47°309	+48°966			14	-59°598	-35°264	66 2962	9°6	9	-41°773	-38°728			10	-20°791	-57°368		
26	+47°520	+5°944	65 3359	8°9	9	-58°962	-2°034			10	-41°661	-0°547			10	-20°610	-54°327		
11	+48°396	+54°028			32	-58°759	-40°788	66 2963	9°0	9	-41°651	-3°766			35	-20°424	-48°478	66 2980	7°7
9	+48°639	+18°663			10	-58°518	-29°144			24	-41°540	-40°077	66 2973	9°0	10	-20°328	-34°409		
9	+48°730	+50°398			9	-58°064	-3°334			9	-41°383	-41°615			9	-20°181	-51°791		
9	+49°170	+60°673			30	-57°918	-58°595	66 2964	9°1	10	-40°128	-9°929			27	-19°739	-20°032	66 2981	9°0
12	+49°395	+30°886			12	-57°368	-44°143			12	-39°539	-43°905			9	-19°551	-7°971		
12	+50°721	+56°389			9	-57°043	-13°360			9	-39°468	-3°362			11	-19°270	-0°613		
	341					401					461					521			
11	+50°852	+16°700			13	-56°990	-25°662	66 2965	9°6	9	-39°210	-3°270			28	-19°217	-47°257	66 2982	8°5
9	+51°124	+23°201			9	-56°897	-37°646			9	-38°572	-60°857			9	-19°089	-11°195		
9	+51°279	+59°482			9	-56°893	-17°788			9	-38°472	-25°499			9	-18°862	-60°916		
9	+51°938	+41°549			12	-56°474	-4°828			11	-38°061	-58°286			9	-18°399	-18°684		
9	+52°230	+41°128			10	-55°996	-9°477			10	-37°954	-18°190			11	-17°334	-0°793		
10	+52°526	+15°800			9	-55°926	-9°391			10	-37°654	-31°427			20	-17°289	-46°748	66 2983	9°0
9	+52°864	+45°247			9	-55°570	-13°765			10	-37°329	-29°726			15	-17°235	-48°925	66 2984	9°6
10	+53°592	+8°470			10	-55°020	-30°785			13	-36°952	-50°636	66 2974	9°7	11	-16°819	-52°350		
9	+53°623	+6°644			9	-54°954	-49°389			23	-36°538	-9°971	66 2975	9°0	11	-16°723	-26°584		
9	+54°274	+17°505			11	-54°781	-55°006			10	-35°295	-52°995			9	-16°622	-44°624		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	531,					591,					651,					711,			
9	-14'896	-35'111			17	+8'714	-35'969	66° 2997	9'7	10	+30'528	-6'799			12	+46'557	-6'691		
9	-14'854	-45'228			13	+9'023	-46'721			9	+30'856	-39'499			10	+46'583	-45'463		
9	-14'162	-27'179			9	+9'988	-38'379			10	+31'097	-31'640			9	+46'592	-44'467		
16	-12'953	-62'834	66 2985	9'7	10	+10'272	-59'597			9	+31'122	-62'222			11	+46'661	-49'238		
18	-12'805	-15'181	66 2986	9'2	9	+10'692	-31'113			9	+31'256	-14'914			9	+46'898	-33'734		
					9	+10'926	-39'982			9	+32'152	-39'835			9	+47'228	-21'362		
9	-12'715	-40'508			11	+11'622	-58'725			9	+32'165	-54'615			12	+47'437	-7'469		
9	-12'616	-58'258			15	+11'880	-37'618	66 2998	9'5	26	+33'025	-19'082	66° 3005	8'7	10	+47'854	-30'674		
9	-12'509	-43'976			11	+11'918	-18'135			10	+33'388	-30'591			14	+48'218	-13'478	66° 3015	9'7
9	-12'417	-15'259			9	+12'251	-36'288			9	+33'571	-31'889			9	+48'221	-7'532		
9	-12'259	-35'423				601					661				721				
	541				9	+12'483	-48'471			14	+34'443	-26'110	66 3006	9'7	10	+48'970	-7'953		
13	-11'968	-3'784	66 2987	9'5	9	+12'519	-52'351			10	+34'600	-60'874			20	+50'587	-37'661	66 3016	9'0
10	-11'681	-2'540			9	+13'129	-44'729			9	+34'610	-35'663			9	+51'125	-22'505		
11	-11'531	-8'114			9	+13'216	-46'246			24	+34'629	-51'416	66 3006	9'0	32	+51'456	-55'732	66 3017	8'4
9	-11'172	-13'954			12	+13'488	-37'546			9	+34'801	-34'099			12	+51'649	-24'424		
11	-10'916	-6'480								11	+34'802	-49'614			9	+51'770	-8'642		
11	-10'137	-11'151			9	+13'806	-14'111			12	+35'189	-10'079			9	+52'152	-13'029		
11	-10'117	-42'218			9	+13'854	-4'351			9	+35'627	-34'566			9	+52'310	-42'861		
9	-9'824	-11'142			9	+14'112	-11'783			11	+36'028	-36'375			9	+53'050	-52'735		
18	-8'836	-49'613	66 2988	9'0	16	+14'199	-42'651	66 2999	9'7	9	+36'204	-36'731			9	+53'423	-26'690		
9	-8'319	-63'622			9	+14'746	-46'667				671				731				
	551				9	+16'168	-30'959			10	+36'595	-52'462			10	+54'312	-49'015		
30	-8'081	-20'669	66 2989	8'8	11	+16'767	-41'873			9	+36'609	-39'927			12	+54'445	-23'864		
9	-7'888	-62'718			20	+17'128	-64'432	67 3193	9'7	23	+36'919	-1'005	65 3356	9'0	10	+54'642	-53'021		
10	-7'821	-37'632			10	+17'430	-46'839			11	+37'552	-4'211			10	+56'034	-19'023		
10	-7'807	-39'098			9	+17'454	-42'973			9	+37'717	-58'144			11	+56'901	-7'243		
9	-7'689	-18'015																	
					14	+17'663	-38'552	66 3000	9'7	9	+37'825	-52'214			9	+56'987	-0'587		
26	-7'443	-44'052	66 2990	8'7	10	+19'058	-0'191			10	+38'447	-52'944			11	+57'334	-61'088		
9	-7'168	-48'029			12	+19'317	-52'001			16	+38'740	-42'200	66 3008	9'6	9	+57'390	-19'015		
10	-6'814	-25'488			10	+19'497	-64'863			9	+38'950	-22'688			9	+57'705	-61'135		
9	-6'773	-64'228			10	+19'786	-41'139			9	+39'142	-21'497			9	+57'716	-42'195		
9	-5'432	-20'133				621					681				741				
	561				11	+20'629	-27'161			9	+39'276	-29'124			13	+57'760	-16'571	66 3018	9'7
9	-5'431	-37'909			14	+20'704	-45'340	66 3001	9'7	64	+39'289	-56'649	66 3009	5'7	9	+57'994	-10'623		
11	-5'224	-58'774			19	+20'728	-51'971			9	+39'393	-29'722			9	+59'461	-57'086		
32	-4'927	-54'825	66 2991	8'2	10	+20'753	-10'494			9	+39'421	-0'202			44	+60'121	-52'769	66 3019	7'9
13	-4'729	-10'342			11	+20'770	-34'070			9	+40'967	-32'808			20	+62'436	-53'205	66 3020	9'3
11	-4'558	-62'088																	
					9	+21'206	-38'799			13	+41'437	-15'476	66 3010	9'7	9	+63'798	-3'062		
12	-3'149	-29'312			10	+21'873	-41'559			9	+41'548	-5'427			9	+63'808	-33'484		
11	-3'122	-44'810			10	+21'958	-17'556			9	+41'794	-25'753			9	+63'943	-11'785		
12	-2'074	-37'875			12	+22'147	-41'956			9	+41'834	-5'775			9	+64'278	-21'510		
11	-1'264	-38'999			9	+22'505	-20'973			9	+41'942	-29'071			11	+64'762	-6'018		
11	-0'704	-41'552				631					691								
	571				15	+22'550	-64'390	67 3199	9'6	9	+41'954	-6'689							
9	-0'413	-53'341			9	+22'841	-30'482			25	+41'988	-38'795	66 3012	8'8					
9	+0'246	-37'897			9	+23'416	-54'658			11	+42'041	-24'297							
16	+0'744	-54'181	66 2992	9'7	9	+23'455	-44'897			9	+42'117	-8'505							
12	+2'216	-34'834			12	+23'674	-8'683	66 3002	9'7	26	+42'340	-8'068	66 3011	8'9					
12	+2'437	-9'177																	
					9	+23'746	-61'993			9	+42'497	-60'298							
9	+2'732	-53'195			23	+24'087	-6'259	66 3003	8'9	9	+42'686	-63'709							
9	+3'092	-17'361			16	+24'555	-43'424	66 3004	9'7	9	+42'739	-32'684							
9	+3'800	-57'740			9	+24'704	-8'067			9	+42'801	-17'685							
9	+3'899	-39'109			11	+24'733	-15'053			22	+43'751	-42'908	66 3013	9'0					
23	+4'515	-26'285	66 2993	9'2		641					701								
	581				9	+24'888	-60'636			12	+44'263	-14'299							
10	+4'643	-16'285			9	+24'898	-5'114			9	+44'391	-12'496							
10	+4'806	-58'855			9	+25'488	-48'447			9	+44'560	-28'920							
30	+4'878	-4'872	66 2994	8'9	12	+25'768	-27'898			9	+44'592	-0'264							
9	+5'088	-53'000			10	+27'409	-34'752			9	+44'662	-4'379							
17	+6'270	-52'159	66 2995	9'2															
					11	+27'833	-2'159			10	+45'067	-16'916							
9	+6'343	-63'144			9	+28'603	-36'561			9	+45'656	-6'617							
10	+6'560	-55'987			9	+29'706	-47'700			14	+45'696	-38'763	66 3014	9'7					
15	+7'058	-12'894	66 2996	9'2	10	+30'040	-36'581			10	+45'852	-52'506							
9	+7'226	-38'688			9	+30'493	-28'120			9	+46'326	-26'233							
10	+7'231	-17'750																	

RECTANGULAR CO-ORDINATES.

16^h 48^m, - 66°

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 16 ^h 48 ^m , - 66°. Plate 3930. 1915, June 19. PROVISIONAL CONSTANTS. a = - '01165 d = - '00087 b = + '00095 e = - '01120 c = + '1574 f = + '0539 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f																			
15	-64'704	+55'947	65 3359	8'9	26	-44'632	+40'822	65 3362	9'2	12	-32'340	+33'109	65 3366	9'5	10	-15'946	+21'456	65 3371	9'2
38	-64'240	+5'383			14	-44'290	+17'963			14	-31'922	+44'353			9	-15'654	+38'074		
14	-64'193	+30'409			9	-44'178	+23'826			14	-31'654	+29'444			14	-15'377	+38'158		
9	-64'050	+18'143			9	-44'004	+17'199			10	-31'606	+40'879			15	-15'298	+31'909		
10	-61'892	+22'850			12	-43'714	+6'485			9	-30'770	+19'549			10	-15'235	+58'494		
12	-61'696	+16'347	65 3360	9'7	9	-43'227	+33'209	65 3363	9'0	20	-30'295	+61'706	64 3568	9'3	13	-15'153	+8'990	65 3372	8'2
14	-60'702	+58'844			11	-43'177	+26'180			11	-30'258	+15'824			17	-14'953	+53'953		
12	-59'952	+15'574			14	-43'042	+24'444			11	-29'741	+38'952			11	-14'381	+1'090		
12	-58'365	+8'348			22	-42'963	+10'360			21	-29'648	+59'089			11	-14'163	+55'477		
12	-58'348	+17'399			10	-42'227	+27'186			10	-29'645	+20'558			11	-14'078	+6'188		
11	-58'194	+6'526	65 3367	9'3	9	-42'469	+59'571	65 3367	9'3	12	-29'521	+30'723	65 3367	9'3	10	-13'700	+18'440	65 3373	8'9
10	-57'342	+9'569			14	-42'348	+44'520			11	-28'893	+35'505			14	-13'619	+44'770		
13	-56'890	+53'500			11	-42'273	+33'936			11	-28'829	+42'568			11	-13'115	+0'672		
10	-56'636	+18'086			10	-42'173	+41'985			11	-28'244	+5'657			9	-13'009	+32'779		
11	-56'255	+50'251			12	-42'127	+32'007			13	-27'603	+37'059			9	-12'896	+15'934		
13	-56'252	+13'995	65 3368	9'5	9	-42'103	+32'473	65 3368	9'5	22	-27'234	+25'328	65 3368	9'5	11	-12'818	+55'068	65 3374	8'1
10	-55'690	+5'983			15	-41'807	+26'004			12	-26'622	+29'982			10	-12'670	+61'858		
12	-55'561	+57'439			10	-41'795	+18'185			12	-26'407	+17'184			10	-12'444	+47'976		
11	-55'268	+18'711			19	-41'780	+29'350			9	-26'324	+64'758			9	-11'482	+26'460		
16	-54'903	+0'328			9	-41'637	+19'407			9	-26'104	+55'007			11	-10'513	+23'952		
12	-54'895	+10'796	65 3369	9'7	12	-41'221	+36'089	65 3369	9'7	10	-25'873	+44'938	65 3370	8'8	32	-10'159	+51'851	65 3374	8'1
14	-54'840	+19'860			10	-40'951	+58'195			12	-25'735	+22'651			11	-9'958	+33'947		
9	-54'796	+1'509			11	-40'946	+7'349			13	-25'632	+45'121			13	-9'901	+29'697		
9	-54'684	+41'904			12	-40'797	+15'401			10	-25'541	+20'892			28	-9'869	+56'237		
17	-54'538	+3'376			10	-40'590	+19'943			22	-24'792	+38'174			10	-9'848	+21'289		
9	-54'529	+27'002	65 3370	9'0	9	-40'267	+39'872	65 3370	9'0	12	-24'788	+39'755	65 3370	9'0	10	-9'525	+16'307	65 3374	8'1
10	-54'109	+7'439			10	-40'155	+27'638			12	-24'452	+26'433			14	-9'508	+17'337		
11	-53'988	+14'181			9	-39'885	+29'537			12	-23'824	+42'920			9	-9'126	+47'762		
10	-53'493	+27'696			10	-39'639	+9'497			20	-23'470	+24'368			13	-8'677	+52'499		
15	-53'036	+4'574			11	-39'501	+47'744			10	-23'042	+33'382			42	-8'567	+3'272		
12	-52'921	+4'909	65 3371	9'7	14	-39'342	+37'433	65 3371	9'7	16	-22'508	+64'260	65 3371	9'7	10	-8'051	+49'921	65 3374	8'1
10	-52'791	+10'437			13	-39'270	+30'954			11	-22'194	+0'791			13	-7'974	+17'467		
12	-52'746	+37'381			11	-38'994	+13'216			16	-22'125	+14'071			10	-7'901	+43'310		
12	-52'267	+32'277			10	-38'730	+41'110			12	-22'109	+9'626			14	-7'558	+9'137		
9	-51'922	+63'486			9	-38'714	+32'973			9	-21'580	+7'200			11	-7'276	+17'683		
9	-51'057	+28'971	65 3372	9'2	24	-38'074	+49'730	65 3372	9'2	11	-20'756	+28'634	65 3372	9'2	10	-6'977	+26'719	65 3374	8'1
12	-51'000	+15'739			14	-37'656	+31'012			11	-20'755	+1'858			9	-6'644	+42'854		
10	-50'549	+26'210			10	-37'631	+1'460			9	-20'746	+54'550			11	-6'513	+22'565		
10	-50'351	+31'377			11	-37'629	+50'809			9	-20'713	+42'354			18	-6'384	+33'493		
14	-49'833	+12'446			11	-37'254	+11'424			12	-20'572	+58'471			11	-6'111	+45'896		
15	-49'706	+25'699	65 3373	9'7	64	-37'250	+47'995	65 3373	9'7	12	-20'560	+32'342	65 3373	9'7	9	-5'571	+59'445	65 3374	8'1
10	-49'440	+25'598			9	-37'206	+50'374			30	-20'487	+37'786			10	-5'492	+50'369		
13	-49'393	+10'042			10	-37'140	+23'678			9	-20'487	+30'412			12	-5'322	+0'732		
10	-49'276	+23'680			11	-37'101	+8'969			9	-19'927	+12'606			18	-5'284	+7'338		
9	-49'197	+38'931			9	-36'916	+63'346			11	-19'322	+49'384			9	-5'189	+41'044		
13	-49'046	+31'342	65 3374	9'7	15	-36'531	+26'325	65 3374	9'7	15	-19'222	+16'410	65 3374	9'7	14	-5'135	+24'713	65 3374	8'1
10	-48'528	+5'156			9	-36'465	+44'398			11	-19'104	+48'260			12	-4'968	+23'925		
20	-48'380	+0'670			9	-35'883	+52'464			17	-18'915	+58'461			9	-4'767	+7'729		
12	-48'355	+7'001			13	-35'798	+13'212			14	-18'366	+12'519			16	-4'513	+61'417		
13	-48'288	+52'803			9	-35'743	+22'049			9	-17'962	+17'016			13	-4'231	+12'618		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
9	- 4'011	+36'049			10	+13'354	+38'444			12	+31'303	+57'693			12	+45'913	+10'382		
13	- 3'849	+31'445			10	+13'644	+25'823			11	+31'560	+25'087			9	+46'074	+32'210		
10	- 3'165	+41'856			12	+14'030	+10'163			12	+31'834	+31'890			20	+46'197	+11'954		
41	- 2'936	+23'967	65 3375	8'2	11	+14'108	+38'652			11	+31'892	+29'351			13	+46'656	+ 0'013		
10	- 2'148	+53'932			22	+14'435	+32'652	65 3383	9'6	15	+31'996	+23'295			12	+46'815	+22'723		
12	- 2'127	+ 1'234			20	+14'455	+52'540	65 3382	9'6	10	+32'364	+37'858			18	+46'842	+24'102		
15	- 1'540	+20'629			11	+14'660	+32'540			10	+32'435	+43'274			11	+47'721	+55'486		
11	- 0'465	+11'316			9	+14'855	+35'996			11	+32'671	+30'344			15	+47'898	+ 5'706		
12	- 0'214	+40'714			13	+15'033	+ 7'060			14	+32'689	+36'055			10	+47'948	+33'130		
10	+ 0'055	+ 9'039			10	+15'038	+43'047			10	+32'755	+39'790			10	+48'007	+40'658		
	241					301					361					421			
11	+ 0'296	+51'373			9	+15'100	+38'472			10	+32'993	+39'916			10	+48'272	+13'232		
9	+ 0'419	+52'529			11	+15'104	+55'208			17	+33'021	+39'089			13	+48'340	+ 3'868		
20	+ 0'993	+44'902	65 3376	9'7	13	+17'061	+41'464			14	+33'048	+19'519			9	+48'964	+29'731		
13	+ 1'114	+62'815			9	+17'140	+43'922			14	+33'118	+30'402			13	+49'132	+51'593		
15	+ 1'451	+43'047			12	+17'439	+52'158			9	+33'306	+37'874			11	+49'400	+10'332		
11	+ 1'528	+30'483			13	+17'448	+38'362			11	+33'517	+13'160			16	+49'574	+34'360		
10	+ 1'580	+27'315			12	+17'536	+29'506			9	+33'601	+17'817			15	+49'931	+48'836	65 3391	9'7
10	+ 1'804	+53'915			10	+17'680	+39'866			9	+33'870	+30'232			11	+50'050	+47'209		
10	+ 1'844	+ 7'921			15	+17'823	+10'213			10	+33'902	+ 0'794			12	+50'716	+40'774		
11	+ 1'889	+14'574			9	+17'891	+31'824			13	+34'022	+22'766			10	+50'850	+40'975		
	251					311					371					431			
12	+ 2'350	+32'001			12	+17'904	+37'384			10	+34'486	+10'568			10	+51'251	+ 7'632		
11	+ 2'621	+63'142			13	+18'357	+10'787			13	+34'562	+37'595			20	+51'727	+ 4'621	65 3392	9'7
10	+ 3'061	+49'048			9	+18'509	+63'309			13	+34'600	+33'485			12	+51'869	+53'059		
10	+ 3'168	+58'770			12	+18'692	+44'397			9	+35'447	+35'262			9	+52'088	+11'275		
10	+ 3'169	+44'400			14	+18'901	+ 1'491			10	+35'597	+39'078			9	+52'281	+31'025		
59	+ 3'225	+57'971	65 3377	7'5	15	+19'440	+ 0'725			10	+35'778	+16'849			16	+52'649	+ 9'626		
12	+ 3'383	+62'327			28	+19'708	+22'718	65 3385	9'2	10	+36'156	+22'786			10	+52'845	+ 0'603		
12	+ 3'418	+ 0'356			9	+20'249	+ 7'180			10	+36'414	+44'648			11	+53'021	+28'854		
9	+ 3'453	+37'593			11	+20'415	+43'660			15	+36'955	+31'394			16	+53'069	+10'155		
9	+ 3'665	+21'965			9	+20'553	+ 4'735			15	+37'034	+64'247			14	+53'080	+51'104		
	261					321					381					441			
11	+ 3'830	+27'021			9	+20'865	+45'341			12	+37'087	+28'499			9	+53'196	+29'569		
9	+ 3'845	+16'917			23	+20'892	+54'004	65 3386	9'5	11	+37'579	+58'878			13	+53'296	+18'552		
11	+ 4'187	+31'358			11	+21'344	+32'313			9	+37'693	+31'702			11	+53'544	+ 6'374		
14	+ 4'458	+44'674			14	+21'800	+ 7'015			12	+37'788	+19'024			9	+53'800	+35'339		
12	+ 4'562	+ 7'895			9	+22'860	+45'628			9	+38'203	+32'948			12	+54'144	+49'303		
14	+ 4'567	+13'629			10	+22'933	+24'284			10	+38'447	+26'927			9	+54'242	+23'950		
16	+ 4'851	+55'363			11	+23'036	+13'164			10	+38'951	+ 5'085			11	+54'329	+ 2'243		
11	+ 5'670	+23'818			40	+23'287	+48'702	65 3387	8'5	13	+39'086	+28'563			11	+54'421	+32'734		
10	+ 5'697	+62'785			13	+23'390	+44'282			9	+39'268	+ 1'832			11	+55'268	+ 7'425		
15	+ 5'806	+35'420			10	+24'171	+42'626			10	+39'612	+ 1'068			9	+56'028	+ 8'227		
	271					331					391					451			
10	+ 6'148	+47'899			9	+25'332	+28'894			11	+39'937	+38'622			12	+56'086	+27'113		
14	+ 6'392	+30'404			9	+25'361	+24'911			11	+40'036	+15'269			11	+56'206	+52'886		
9	+ 6'446	+39'058			10	+25'865	+35'624			11	+40'120	+20'074			12	+56'244	+23'576		
11	+ 6'611	+ 5'249			9	+25'956	+29'124			9	+40'725	+22'889			11	+56'439	+15'423		
13	+ 6'670	+ 5'947			10	+26'039	+23'081			42	+40'982	+29'475	65 3389	8'2	10	+56'458	+27'755		
9	+ 7'763	+63'411			12	+26'136	+ 1'672			12	+41'294	+40'460			10	+56'600	+ 9'326		
13	+ 8'095	+63'172			12	+27'099	+15'911			10	+41'405	+64'887			11	+56'692	+27'109		
15	+ 8'439	+27'663			9	+27'157	+ 6'825			11	+41'931	+ 5'823			11	+57'050	+21'333		
10	+ 8'821	+48'306			12	+27'194	+34'086			9	+42'051	+22'438			18	+57'293	+35'905		
11	+ 9'291	+29'721			11	+27'557	+12'500			13	+42'074	+40'317			10	+58'133	+13'513		
	281					341					401					461			
10	+ 9'532	+21'007			9	+28'060	+14'861			12	+42'462	+55'630			9	+58'207	+10'999		
12	+ 9'845	+ 9'048			9	+28'834	+28'334			22	+42'695	+10'521	65 3390	9'5	13	+58'542	+32'466		
20	+ 9'991	+41'351	65 3379	9'5	9	+29'601	+13'705			11	+42'731	+58'099			21	+58'601	+23'173	65 3393	9'5
12	+10'124	+ 9'437			12	+29'813	+15'537			13	+42'989	+25'012			10	+58'612	+33'786		
11	+10'268	+12'956			11	+30'080	+28'604			12	+43'369	+16'163			9	+58'626	+ 1'795		
9	+10'394	+ 6'551			11	+30'258	+55'755			10	+43'506	+38'048			15	+58'820	+41'397		
10	+10'799	+46'491			15	+30'505	+ 7'155			13	+43'809	+32'449			10	+59'028	+13'099		
9	+11'452	+32'302			20	+30'830	+12'955	65 3388	9'7	18	+44'068	+36'327			9	+59'071	+36'368		
28	+11'724	+ 6'067	65 3380	9'3	12	+31'030	+40'979			14	+45'283	+50'379			56	+59'701	+22'657	65 3394	7'6
22	+12'862	+12'472	65 3381	9'7	11	+31'101	+41'028			12	+45'600	+25'431			10	+60'101	+48'031		

RECTANGULAR CO-ORDINATES.

16° 48', - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	471					531					591					651			
9	+60°215	+23°757			14	-43°110	-11°610			10	-27°219	-6°435			12	-9°718	-16°034		
9	+60°858	+22°972			11	-42°773	-9°045			9	-26°931	-15°931			10	-9°690	-44°976		
9	+62°449	+38°065			11	-42°456	-18°140			13	-26°926	-8°849			12	-9°497	-33°117		
16	+63°134	+0°837			9	-42°419	-5°657			10	-26°099	-56°991			13	-9°446	-61°448		
14	+63°330	+6°306			23	-41°755	-37°131	66 3021	9.2	9	-25°909	-35°661			10	-9°391	-6°801		
11	+64°636	+32°504			10	-41°697	-21°404			14	-25°606	-29°316			13	-9°234	-45°520		
12	+64°822	+21°639			20	-41°660	-32°223	66 3022	9.5	10	-25°375	-19°744			12	-8°978	-5°602		
9	+64°911	+11°933			11	-41°559	-39°046			12	-25°103	-6°166			11	-8°529	-42°730		
30	-64°461	-43°641	66 3013	9.0	26	-41°497	-35°910	66 3023	8.9	9	-24°833	-25°853			13	-8°395	-18°521		
13	-64°276	-7°292			10	-40°951	-30°475			15	-24°501	-61°082			10	-8°384	-61°504		
	481					541					601					661			
14	-63°342	-8°015			14	-40°682	-15°871			10	-24°438	-27°386			42	-8°374	-60°790	66 3038	8.5
15	-62°801	-39°352	66 3014	9.7	12	-40°641	-36°326			13	-24°166	-10°076			14	-8°157	-54°323		
10	-62°573	-8°020			9	-40°356	-19°365			17	-24°074	-16°183	66 3030	9.7	10	-7°366	-34°848		
10	-62°547	-21°876			10	-38°753	-28°246			12	-23°748	-28°646			13	-6°444	-13°104		
20	-62°139	-13°952	66 3015	9.7	18	-38°632	-14°898	66 3024	9.5	22	-23°062	-61°670	66 3029	9.3	15	-5°914	-21°859		
12	-61°786	-8°401			9	-37°787	-46°317			18	-22°437	-23°815			9	-5°711	-4°450		
9	-61°673	-16°846			10	-37°429	-27°422			20	-22°304	-34°627	66 3031	9.5	9	-4°479	-30°445		
11	-61°650	-53°049			11	-37°254	-30°889			9	-21°955	-1°178			11	-4°273	-51°953		
11	-61°429	-45°972			9	-36°940	-10°438			11	-21°951	-64°109			18	-3°943	-33°777		
11	-61°231	-31°135			16	-36°317	-8°596			9	-21°644	-51°294			30	-3°576	-48°876	66 3039	8.7
	491					551					611					671			
13	-61°073	-49°692			16	-35°521	-56°340	66 3025	9.5	22	-21°430	-53°159	66 3032	9.2	20	-3°296	-3°276	66 3040	9.6
11	-58°931	-8°866			12	-35°411	-16°378			11	-21°114	-1°830			11	-2°583	-28°740		
11	-58°586	-22°735			10	-35°317	-42°051			30	-21°024	-19°861	66 3034	8.9	9	-2°345	-33°930		
13	-58°237	-13°204			11	-35°068	-4°636			22	-20°830	-35°723	66 3033	9.2	10	-2°022	-62°516		
20	-58°021	-37°899	66 3016	9.0	12	-34°939	-8°700			9	-19°732	-35°149			12	-1°995	-7°284		
15	-57°913	-24°610			13	-34°789	-47°675			11	-19°451	-33°973			13	-1°588	-41°298		
9	-55°986	-26°744			12	-34°621	-62°566			11	-19°187	-40°216			12	-0°927	-19°597		
9	-55°897	-42°937			11	-34°600	-18°809			19	-19°138	-39°754	66 3035	9.7	9	-0°830	-47°294		
54	-55°836	-55°866	66 3017	8.4	10	-34°481	-29°928			9	-18°746	-44°919			13	-0°759	-44°384		
14	-55°190	-23°867			9	-34°250	-45°543			14	-18°626	-8°040			10	-0°512	-25°311		
	501					561					621					681			
11	-54°312	-0°452			9	-33°814	-14°852			9	-18°369	-28°850			9	-0°331	-15°500		
11	-53°940	-18°911			10	-33°661	-25°943			10	-18°343	-54°257			9	-0°313	-26°614		
14	-53°923	-7°104			11	-33°648	-32°551			10	-18°252	-29°270			30	-0°242	-41°882	66 3041	8.7
13	-53°470	-48°926			10	-33°608	-24°543			11	-17°920	-56°375			9	-0°236	-62°889		
11	-53°335	-5°264			11	-33°341	-49°891			14	-17°778	-46°950			11	-0°047	-28°512		
10	-53°009	-8°120			13	-33°336	-39°888			9	-17°735	-2°544			10	+0°318	-54°570		
11	-52°860	-52°897			11	-32°512	-29°060			38	-17°677	-8°615	66 3036	8.6	30	+0°451	-60°302	66 3042	8.7
12	-52°587	-10°381			10	-32°302	-42°865			9	-17°280	-13°977			10	+0°970	-9°595		
10	-52°584	-18°792			13	-31°777	-64°819			9	-16°712	-56°672			15	+1°202	-27°336		
16	-52°397	-16°336	66 3018	9.7	10	-31°451	-43°625			9	-16°381	-60°435			15	+1°250	-64°040		
	511					571					631					691			
9	-52°304	-40°428			10	-31°014	-59°301			13	-16°220	-38°969			9	+1°692	-46°972		
9	-51°418	-38°204			11	-31°000	-37°659			9	-16°217	-22°426			11	+1°741	-41°764		
10	-50°573	-41°893			10	-30°827	-35°301			9	-15°975	-1°501			30	+1°773	-20°897	66 3044	9.3
14	-49°593	-60°733			11	-30°505	-7°527			9	-15°711	-62°954			34	+1°998	-53°759	66 3043	8.7
10	-49°293	-14°540			10	-30°488	-7°468			36	-15°275	-56°745	66 3037	8.5	34	+2°361	-29°556	66 3045	8.9
12	-49°215	-60°780			13	-30°354	-33°093			12	-15°251	-59°816			10	+2°822	-56°812		
9	-48°106	-11°348			10	-30°274	-39°963			9	-15°118	-57°154			10	+2°886	-13°271		
9	-47°861	-0°833			26	-30°197	-28°605	66 3027	8.9	10	-14°919	-36°157			9	+3°620	-24°784		
11	-47°757	-56°605			22	-29°948	-43°939	66 3026	9.5	9	-14°451	-53°443			9	+3°810	-32°483		
44	-47°416	-52°273	66 3019	7.9	14	-29°897	-54°561			13	-14°271	-41°560			11	+3°819	-25°060		
	521					581					641					701			
13	-47°355	-2°417			10	-29°805	-53°171			14	-13°996	-33°436			14	+3°936	-12°366		
10	-47°278	-23°375			11	-29°335	-56°621			11	-13°820	-17°949			15	+4°225	-28°224		
9	-47°066	-56°263			18	-28°600	-25°630	66 3028	9.7	12	-13°509	-43°040			9	+4°286	-51°578		
12	-46°565	-11°117			10	-28°538	-13°819			14	-12°703	-1°640			11	+4°390	-36°355		
9	-46°253	-32°020			14	-28°095	-4°700			11	-12°674	-27°523			11	+4°473	-56°057		
13	-46°176	-5°301			13	-28°080	-34°284			9	-12°110	-10°989			13	+4°574	-20°131		
10	-45°544	-20°781			9	-27°802	-10°955			13	-11°263	-53°232			10	+4°893	-45°296		
12	-45°459	-2°355			11	-27°704	-29°392			9	-11°167	-34°905			10	+5°135	-27°713		
12	-45°125	-32°753			9	-27°353	-57°629			11	-11°025	-23°503			9	+5°221	-43°010		
22	-45°066	-52°535	66 3020	9.3	9	-27°286	-6°415			9	-9°933	-62°068			9	+5°243	-63°003		

16h 48m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
<div>PLATE CENTRE. 17h 6m, - 66°. Plate 1017. 1894, June 29. PROVISIONAL CONSTANTS. a = - '01138 d = + '00006 b = - '00009 e = - '01130 c = - '1196 f = - '0293 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$</div>																			
9	711 + 5'462	-32'031			34	771 +28'064	-47'033	66 3052	8'6	14	831 +43'115	-32'946			12	-64'397	+48'352	65 3391	9'7
9	+ 5'651	- 7'606			10	+26'287	-56'834			9	+44'025	-20'718			9	-64'161	+46'734		
11	+ 5'718	-36'113			15	+26'559	-59'856			16	+44'068	- 3'619			11	-63'731	+33'896		
11	+ 6'087	-19'793			24	+26'678	- 7'955	66 3053	9'0	13	+44'933	-33'447			13	-63'642	+64'727	64 3592	9'7
10	+ 6'395	-40'412			10	+26'761	-56'174			9	+45'431	- 8'841			10	-63'374	+ 5'197		
9	+ 6'468	-37'219			13	+27'397	-56'071			9	+45'548	-22'331			9	-63'034	+40'360		
9	+ 6'484	-32'735			11	+27'756	- 7'890			13	+45'735	- 8'579			9	-62'804	+ 3'389		
12	+ 6'795	- 0'386			14	+27'860	-35'235			9	+45'988	-24'596			10	-62'764	+52'793		
9	+ 6'847	- 3'919			9	+28'173	- 0'536			9	+46'021	-10'402			9	-62'204	+ 9'918		
18	+ 6'903	-43'222	66 3046	9'7	12	+28'229	- 2'116			23	+46'388	-18'577	66 3057	9'3	11	-61'426	+50'839		
22	721 + 6'949	- 0'932	65 3378	9'2	10	781 +28'422	-31'592			18	841 +46'684	-18'344			9	-60'223	+49'125		
12	+ 7'155	- 8'715			9	+28'655	- 7'455			12	+47'635	-55'996			9	-60'166	+ 7'354		
12	+ 7'157	-46'895			11	+28'894	-16'296			18	+47'848	- 0'623			9	-59'912	+28'633		
14	+ 7'789	-33'298			12	+29'133	-62'354			9	+47'852	-13'350			14	-59'474	+ 4'352	65 3392	9'7
11	+ 8'085	-53'357			9	+29'593	- 6'987			22	+47'872	-35'535	66 3058	9'3	9	-58'908	+18'387		
11	+ 8'087	-41'561			13	+30'069	-36'016			10	+48'121	-27'615			11	-58'907	+ 9'441		
9	+ 8'136	-15'280			12	+30'265	-45'237			11	+48'134	-14'593			9	-58'800	+32'611		
40	+ 8'265	-63'347	67 3260	8'2	26	+30'380	-40'072	66 3054	9'2	11	+48'261	- 6'412			10	-58'516	+10'007		
11	+ 8'450	-15'154			9	+30'531	-10'622			15	+49'079	-55'520			9	-58'405	+52'830		
13	+ 8'557	-42'254			14	+30'537	-30'427			16	+49'272	-52'700			9	-58'086	+ 0'462		
11	731 + 8'788	-50'306			13	791 +31'435	-58'831			12	851 +49'406	-19'436			9	-57'789	+ 6'259		
9	+ 9'023	-29'270			12	+31'675	-10'670			10	+49'577	- 5'636			9	-56'722	+ 2'195		
10	+ 9'586	-61'633			9	+32'277	-25'913			9	+49'859	- 7'270			9	-56'718	+27'143		
12	+ 9'932	-10'801			9	+32'800	-15'052			11	+50'360	-47'223			9	-56'408	+27'790		
22	+10'915	- 3'497	66 3047	9'0	15	+32'993	-22'141			10	+50'895	-26'537			9	-56'312	+23'597		
26	+11'080	- 9'397	66 3048	9'5	9	+33'181	-51'243			12	+50'922	-32'436			9	-56'149	+ 7'434		
11	+11'350	-30'526			9	+33'286	-18'535			9	+51'288	-41'954			14	-56'135	+35'977		
12	+11'621	-22'875			10	+33'691	-34'216			10	+51'380	- 8'505			9	-56'122	+27'174		
10	+11'911	- 4'505			11	+33'738	-60'313			9	+51'454	-14'042			9	-55'539	+15'496		
10	+11'924	-45'514			14	+33'855	-25'140			11	+51'522	- 0'340			9	-55'353	+21'431		
12	741 +11'998	-17'682			10	801 +34'007	-31'499			22	+52'095	-17'047	66 3059	9'3	9	-55'006	+41'573		
12	+13'977	-61'853			9	+34'497	-47'679			12	+53'011	- 8'213			9	-54'685	+33'966		
12	+14'367	-44'806			11	+34'907	-52'714			11	+53'032	-25'478			9	-54'651	+32'647		
11	+15'527	-39'788			11	+34'919	-54'802			11	+53'347	-15'501			9	-54'412	+36'566		
9	+15'565	-52'917			10	+35'349	-19'292			10	+53'367	-17'777			9	-54'222	+48'252		
10	+16'186	-35'734			9	+35'561	-33'130			12	+53'697	-28'551			9	-54'050	+50'798		
14	+16'205	-36'320			9	+36'233	-31'046			12	+54'076	-22'341			15	-53'926	+23'370	65 3393	9'5
14	+16'296	-31'051			9	+36'664	- 9'954			10	+54'758	-62'269			9	-53'719	+13'696		
9	+16'399	-44'005			12	+37'082	-54'676			11	+55'240	- 0'593			48	-52'795	+22'961	65 3394	7'6
12	+16'548	-44'035			10	+37'147	-53'624			13	+55'568	-17'331			9	-52'792	+13'338		
14	751 +16'793	-56'846			15	811 +37'334	-40'316			9	+56'195	-60'905			41				
21	+17'118	- 1'935	65 3384	9'2	11	+37'458	-36'005			56	+56'703	-64'832	67 3284	7'3	9	-51'158	+38'491		
9	+17'816	-42'425			15	+37'870	- 9'224			13	+56'711	-44'367			9	-48'980	+20'571		
38	+18'004	-21'855	66 3049	8'6	9	+37'927	-35'991			16	+57'224	- 0'323			9	-48'572	+33'101		
13	+18'004	- 6'563			9	+38'338	-42'191			9	+57'540	-63'981			11	-48'131	+55'163		
15	+19'134	-46'573			11	+38'368	- 3'317			9	+57'546	-43'891			9	-48'023	+ 6'896		
9	+19'710	- 4'401			10	+38'674	-62'678			34	+57'848	-40'680	66 3060	8'9	11	-47'895	+32'901		
24	+21'197	-55'212	66 3050	9'0	14	+38'852	- 7'391			9	+58'092	-19'187			11	-47'815	+ 1'421		
12	+21'615	- 5'871			10	+38'980	-33'598			9	+58'092	-19'187			9	-47'629	+22'293		
9	+21'912	-27'279			13	+39'216	-29'883			16	+60'276	- 5'019			9	-46'843	+12'608		
11	761 +22'920	-33'522			20	821 +39'626	-38'260	66 3055	9'7	12	+60'758	-22'924			9	-46'702	+16'512		
11	+22'985	-15'699			11	+40'336	-49'164			14	+61'115	- 9'630							
11	+23'070	-25'833			13	+40'588	- 3'886			9	+61'493	-58'417							
12	+24'108	-47'942			11	+40'901	-32'502			10	+62'851	-53'965							
33	+24'144	-16'330	66 3051	8'6	36	+41'067	-32'992	66 3056	8'6	9	+63'088	-38'843							
11	+24'363	-55'290			11	+41'078	-22'249			13	+63'115	-48'291							
11	+24'804	-23'997			10	+41'093	-34'931			13	+63'220	-12'036							
22	+25'029	-26'414			10	+42'227	-50'690			11	+63'301	-12'456							
9	+25'358	-52'438			9	+42'877	-23'485			11	+63'516	-28'286							
15	+25'602	-46'679			16	+42'952	-52'666			32	+63'539	-58'333	66 3061	9'0					

RECTANGULAR CO-ORDINATES.

17^h 6^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
15	-46°486	+53°860	65 3396	9.7	9	-27°057	+33°741			12	-2°655	+41°016			9	+20°320	+28°142		
10	-46°306	+52°988			9	-26°753	+64°028			9	-2°613	+0°413			9	+21°044	+37°694		
11	-45°764	+54°343			9	-26°658	+27°310			9	-2°508	+46°865			11	+21°189	+17°490		
12	-45°296	+44°400			9	-26°200	+36°044			9	-2°094	+48°929			9	+21°450	+29°628		
16	-45°280	+10°495	65 3395	9.3	12	-25°748	+43°686			9	-0°615	+12°496			9	+21°869	+37°984		
11	-45°055	+24°933			9	-25°690	+26°396			9	-0°135	+3°527			10	+21°992	+17°039		
11	-44°908	+31°969			17	-25°541	+37°938	65 3406	9.2	13	+0°101	+22°360	65 3415	9.5	9	+23°090	+59°124		
9	-44°568	+5°746			9	-25°278	+6°390			11	+0°144	+54°753			9	+24°809	+3°528		
9	-43°994	+12°708			9	-24°936	+49°473			9	+0°196	+25°743			13	+25°184	+14°474	65 3426	9.6
11	-43°753	+57°203			9	-24°417	+30°267			9	+0°564	+13°636			9	+25°217	+38°900		
	61					121					181					241			
18	-43°196	+14°646	65 3397	8.9	14	-24°368	+40°823	65 3407	9.6	13	+1°139	+19°948	65 3416	9.8	9	+25°319	+36°375		
13	-42°823	+6°555			9	-24°217	+21°614			12	+1°972	+36°295			9	+25°344	+47°498		
12	-42°721	+48°068			9	-23°681	+33°213			9	+2°356	+3°172			9	+25°423	+20°402		
9	-42°182	+10°396			9	-23°550	+42°602			9	+2°383	+39°619			9	+25°466	+28°259		
10	-41°920	+36°792			9	-21°362	+39°788			14	+2°555	+22°320	65 3417	9.2	9	+25°575	+46°559		
9	-41°753	+27°584			9	-21°147	+32°515			9	+2°617	+21°723			13	+25°615	+4°307	65 3427	9.6
9	-41°618	+33°881			9	-20°211	+12°396			9	+3°023	+10°524			9	+25°918	+33°929		
23	-41°361	+48°968	65 3398	8.7	12	-19°423	+56°146			14	+4°214	+29°943	65 3418	9.4	15	+26°161	+29°091	65 3428	9.8
11	-41°168	+43°602			9	-18°950	+57°859			9	+4°278	+17°787			9	+27°282	+33°316		
9	-40°844	+26°006			10	-18°629	+45°996			13	+4°286	+61°571	64 3613	9.9	9	+27°509	+60°333		
	71					131					191					251			
13	-40°452	+7°249			10	-17°752	+63°876			9	+4°324	+44°797			15	+27°948	+58°419	65 3429	9.4
9	-40°267	+6°110			11	-17°229	+56°198			9	+4°424	+1°797			15	+28°191	+35°096	65 3430	9.9
12	-39°704	+39°549	65 3400	9.9	14	-16°783	+59°457	64 3602	9.9	14	+4°568	+54°144	65 3419	9.6	9	+28°455	+5°298		
14	-39°662	+23°719	65 3399	9.7	9	-16°431	+38°897			9	+4°798	+32°005			10	+28°487	+2°177	65 3431	9.9
9	-39°595	+19°214			11	-15°955	+64°588			9	+5°132	+28°490			9	+28°519	+2°049		
15	-39°106	+42°021	65 3401	9.5	9	-15°711	+12°826			9	+5°218	+53°619			15	+28°550	+5°158	65 3432	9.2
10	-38°413	+7°691			9	-15°542	+32°938			9	+6°117	+29°348			12	+28°803	+45°404		
9	-38°059	+62°978			9	-15°403	+57°129			9	+6°285	+11°813			9	+28°817	+13°704		
11	-37°958	+12°774			12	-15°365	+32°758			9	+6°306	+0°785			9	+30°473	+41°517		
9	-37°533	+27°763			9	-15°154	+28°152			9	+6°768	+21°690			9	+30°655	+62°910		
	81					141					201					261			
9	-37°432	+4°334			9	-14°686	+42°891			9	+7°063	+10°787			9	+30°832	+28°981		
10	-36°032	+30°302			11	-14°550	+40°879			9	+7°531	+64°370			18	+30°993	+34°613	65 3433	9.3
16	-35°471	+22°171	65 3402	9.0	13	-14°073	+45°170			9	+7°633	+44°707			9	+31°911	+35°476		
9	-34°477	+52°565			35	-13°092	+26°452	65 3408	8.4	14	+7°692	+7°168	65 3420	9.4	9	+32°499	+21°403		
9	-34°407	+39°580			9	-12°910	+61°685			9	+9°933	+31°775			9	+32°539	+30°687		
15	-34°209	+56°457	65 3403	9.6	9	-12°240	+12°712			14	+10°135	+26°854	65 3421	9.5	9	+32°889	+34°779		
13	-33°814	+9°976			9	-12°002	+26°592			9	+10°818	+5°524			16	+33°290	+51°990	65 3434	9.2
12	-33°762	+42°501			9	-11°901	+7°601			9	+10°985	+13°605			14	+33°442	+63°562	64 3622	9.5
9	-33°730	+14°003			34	-11°434	+9°821	65 3409	8.4	9	+11°228	+1°363			9	+33°729	+30°737		
9	-33°633	+19°326			9	-10°663	+49°920			9	+11°470	+20°926			9	+33°744	+2°429		
	91					151					211					271			
9	-33°533	+31°821			14	-10°531	+0°635	65 3410	9.3	19	+11°571	+13°281	65 3422	9.0	10	+34°597	+6°559		
16	-33°085	+60°242	64 3595	9.0	9	-10°171	+35°433			9	+12°428	+49°941			12	+34°812	+47°520		
10	-32°931	+19°470			10	-10°121	+40°499			9	+13°148	+25°289			9	+34°903	+32°519		
12	-32°758	+46°057			9	-9°731	+56°066			9	+13°307	+47°457			9	+36°189	+39°354		
9	-31°927	+35°409			10	-9°164	+44°118			9	+13°394	+1°146			9	+37°022	+28°364		
9	-31°192	+1°239			9	-8°893	+61°478			13	+13°668	+33°943	65 3423	9.9	9	+37°421	+9°138		
9	-30°972	+25°986			9	-8°085	+24°893			10	+14°828	+8°509			9	+37°700	+19°910		
9	-30°924	+4°669			9	-7°738	+28°798			11	+14°965	+49°001			10	+37°810	+22°238		
11	-30°832	+51°998			9	-7°473	+8°878			16	+15°676	+53°819	65 3424	9.3	9	+37°936	+14°312		
11	-30°717	+57°763			9	-6°432	+32°515			15	+16°945	+31°021	65 3425	9.2	9	+38°295	+38°821		
	101					161					221					281			
12	-30°663	+1°246	65 3404	9.9	12	-6°084	+40°722			9	+17°232	+55°355			9	+38°769	+43°192		
15	-30°207	+6°326	65 3405	9.2	13	-5°766	+49°142	65 3412	9.9	9	+17°542	+48°718			9	+39°925	+5°742		
9	-29°424	+15°131			10	-5°619	+17°311			10	+18°183	+2°453			9	+40°009	+11°794		
9	-29°269	+14°212			9	-5°141	+37°943			9	+18°265	+36°028			20	+41°995	+47°017	65 3435	8.9
10	-28°949	+60°401			9	-4°305	+1°487			9	+18°482	+20°356			10	+42°048	+37°426		
9	-28°781	+39°087			9	-3°821	+33°334			9	+19°016	+21°318			9	+42°397	+5°256		
9	-28°269	+7°692			11	-3°743	+43°490			9	+19°151	+13°899			12	+42°716	+24°510		
9	-28°069	+33°379			10	-3°333	+6°919	65 3413	9.9	9	+19°596	+45°629			9	+43°120	+0°067		
9	-28°007	+34°077			16	-2°969	+21°220	65 3414	9.0	9	+19°792	+24°388			9	+43°136	+40°735		
9	-27°530	+29°641			9	-2°706	+12°944			9	+20°081	+30°987			9	+43°842	+29°746		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	291					351					411					471			
9	+43'886	+37'766			9	-55'216	-22'343			26	-22'288	-29'402	66 3070	8'8	12	+4'555	-34'152		
11	+44'079	+64'378			9	-55'156	-28'559			9	-22'093	-46'621			9	+5'231	-61'186		
9	+44'617	+55'230			10	-54'081	-17'240			10	-21'511	-22'840			9	+5'602	-53'753		
24	+44'876	+8'792	65 3436	8'4	14	-53'665	-0'164			9	-21'265	-41'496			12	+5'760	-35'547	66 3079	9'8
9	+44'900	+27'542			9	-51'741	-62'079			19	-20'273	-29'351	66 3071	9'2	11	+6'034	-29'259		
12	+45'259	+40'938			10	-51'046	-44'103			9	-19'375	-40'771			36	+7'274	-50'499	66 3080	7'6
9	+45'582	+20'779			9	-50'922	-64'969			10	-18'734	-40'885			22	+7'828	-14'100	66 3081	9'0
9	+45'671	+39'447			9	-50'397	-60'643			9	-18'668	-23'810			9	+8'144	-60'573		
15	+48'337	+34'958	65 3437	9'4	12	-50'274	-4'592			11	-18'280	-19'489			9	+8'607	-31'542		
9	+48'579	+20'288			9	-50'250	-43'585			12	-17'949	-36'419			9	+9'332	-50'479		
9	+49'252	+1'459			18	-50'165	-40'368	66 3060	8'9	12	-17'699	-4'512	66 3072	9'5	16	+9'889	-6'480	66 3082	9'5
9	+49'795	+27'970			56	-49'598	-64'515	67 3284	7'3	24	-17'297	-64'494	67 3295	8'7	10	+10'422	-62'081		
62	+50'221	+23'341	65 3438	7'1	12	-49'092	-9'159			56	-17'193	-64'977	67 3296	7'8	12	+10'617	-4'821	66 3083	9'6
13	+50'614	+6'588			9	-48'520	-22'449			9	-16'899	-37'478			11	+11'248	-9'846		
9	+51'296	+14'090			10	-46'833	-11'417			9	-16'697	-20'418			9	+11'761	-11'551		
14	+51'386	+34'953	65 3439	9'9	9	-46'734	-11'832			9	-16'407	-11'893			12	+11'846	-31'749		
9	+51'616	+11'110			9	-45'386	-27'601			9	-15'893	-30'878			10	+12'182	-36'440		
9	+52'465	+27'117			9	-45'286	-57'776			18	-15'749	-57'698	66 3073	9'0	9	+12'194	-55'324		
9	+52'985	+39'486			10	-45'050	-38'123			9	-15'379	-34'578			9	+14'158	-16'536		
9	+53'043	+37'072			12	-44'366	-47'573			10	-15'259	-54'811			10	+15'220	-6'929		
13	+53'341	+2'146	65 3441	9'8	9	-44'251	-53'251			10	-15'209	-15'911			13	+15'370	-24'343		
16	+53'566	+37'464	65 3440	9'2	20	-43'239	-57'562	66 3061	9'0	9	-14'223	-34'301			12	+15'522	-3'884	66 3084	9'8
11	+54'206	+41'314			9	-43'108	-38'477			9	-13'405	-47'749			20	+16'329	-36'084	66 3085	8'8
9	+54'241	+36'323			12	-42'819	-40'989			11	-13'053	-34'441			11	+16'864	-16'534		
9	+54'686	+8'564			14	-42'154	-33'998	66 3062	9'7	11	-12'166	-55'139			9	+17'154	-44'340		
9	+54'862	+35'491			10	-41'685	-0'876			9	-11'719	-45'550			9	+17'493	-39'157		
9	+55'241	+6'925			20	-41'420	-41'333	66 3063	8'7	9	-11'632	-37'986			10	+18'221	-27'788		
9	+55'729	+18'855			20	-41'209	-4'304	66 3064	9'0	9	-11'229	-26'458			11	+18'428	-49'238		
9	+56'157	+33'757			11	-41'179	-14'940			12	-10'505	-31'232			9	+18'505	-30'598		
9	+56'745	+3'932			9	-41'056	-18'411			11	-8'794	-50'912			9	+19'119	-17'050		
22	+57'117	+53'769	65 3442	8'8	15	-40'700	-15'781	66 3065	9'7	14	-8'684	-64'103	67 3302	9'3	10	+19'142	-21'676		
9	+57'835	+36'112			9	-38'907	-6'793			10	-8'454	-47'523			9	+21'005	-41'601		
9	+60'286	+6'220			12	-38'548	-25'080	66 3067	9'6	9	-8'410	-9'082			10	+21'139	-0'070		
9	+60'578	+24'913			9	-38'422	-42'945			9	-7'553	-26'105			9	+21'757	-23'189		
9	+60'966	+51'892			13	-38'370	-34'928	66 3066	9'8	11	-7'023	-27'916			9	+21'853	-55'896		
19	+61'495	+25'122	65 3443	8'8	11	-38'269	-56'670			13	-5'978	-0'402	65 3411	9'6	12	+23'319	-53'503		
9	+61'860	+30'292			9	-38'204	-28'145			10	-5'504	-54'357			9	+23'341	-43'500		
18	+63'361	+9'778	65 3444	9'2	9	-37'846	-56'089			26	-4'506	-25'428	66 3074	8'8	15	+24'584	-39'500	66 3086	9'2
9	+63'899	+24'291			11	-37'402	-57'053			9	-4'382	-26'326			9	+24'684	-34'011		
11	-64'502	-9'205			9	-36'712	-46'310			9	-4'030	-21'532			9	+25'194	-32'606		
10	-64'179	-0'581			10	-36'394	-35'452			15	-3'731	-26'744	66 3075	9'6	10	+25'465	-56'176		
12	-64'172	-53'372			14	-36'129	-64'188	67 3290	9'7	15	-3'390	-5'359	66 3076	9'2	9	+25'938	-21'640		
10	-63'557	-34'055			16	-35'470	-49'245	66 3068	9'2	12	-2'957	-52'276			9	+26'256	-14'291		
16	-63'154	-19'132	66 3057	9'3	10	-34'129	-49'209			10	-2'573	-46'431			9	+26'273	-56'594		
12	-62'975	-1'108			24	-33'793	-59'026	66 3069	8'8	9	-2'050	-28'139			9	+26'516	-1'875		
12	-62'883	-18'873			11	-32'562	-23'216			9	-1'450	-43'719			9	+26'731	-40'618		
16	-60'481	-35'943	66 3058	9'3	9	-31'066	-30'281			20	-1'241	-28'540	66 3077	9'0	13	+27'080	-57'794	66 3087	9'8
9	-60'084	-19'766			10	-30'783	-42'618			9	-0'771	-53'893			12	+28'788	-19'306		
9	-59'272	-56'359			9	-29'617	-12'838			9	-0'534	-9'111			9	+29'353	-60'839		
9	-58'884	-8'741			11	-29'450	-2'611			11	+0'198	-52'703			18	+30'604	-20'148	66 3088	9'6
9	-58'101	-26'754			11	-26'877	-9'425			9	+0'438	-64'777			9	+30'836	-21'404		
12	-57'878	-52'959			9	-26'563	-14'513			9	+0'949	-54'625			9	+31'026	-34'070		
12	-57'870	-55'781			9	-25'767	-56'728			9	+0'975	-10'900			10	+31'349	-4'620		
9	-57'642	-32'628			9	-25'758	-36'627			18	+0'980	-39'361	66 3078	9'2	12	+32'393	-12'514		
16	-57'567	-17'199	66 3059	9'3	9	-25'448	-48'689			10	+1'068	-55'316			11	+32'512	-23'483		
9	-57'270	-8'311			10	-25'253	-9'020			0	+1'263	-42'683			9	+32'864	-23'636		
9	-57'170	-47'414			12	-24'020	-38'627			9	+1'456	-11'630			9	+33'114	-30'268		
9	-56'444	-15'574			12	-23'496	-48'534			12	+2'790	-47'698			16	+33'167	-43'158	66 3090	9'2
9	-56'038	-25'551			9	-23'235	-57'686			9	+2'918	-45'418			16	+33'520	-16'396	66 3089	9'2
9	-55'599	-0'572			10	-22'647	-8'125			9	+4'473	-47'896			9	+33'874	-0'587		

RECTANGULAR CO-ORDINATES.

17^h 24^m, - 66°

C.P.D.				C.P.D.				C.P.D.				C.P.D.											
Diam.		x	y	No.		Mag.		Diam.		x	y	No.		Mag.		Diam.		x	y	No.		Mag.	
								PLATE CENTRE. 17 ^h 24 ^m , - 66°. Plate 3035. 1909, Aug. 8. PROVISIONAL CONSTANTS. $a = - .01151$ $d = - .00087$ $b = + .00103$ $e = - .01153$ $c = + .1102$ $f = + .1205$ To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$															

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
10	+27'134	+63'081			13	-47'887	-55'914	66 3107	9'2	10	+1'466	-34'863			10	+55'855	-17'897		
15	+28'675	+12'656	65 3469	9'6	9	-47'108	-26'469			9	+2'068	-52'561			23	+56'520	-47'026	66 3133	8'4
9	+28'920	+53'184			11	-47'022	-0'389			10	+3'966	-15'323			11	+57'087	-27'620		
9	+29'187	+56'334			12	-46'371	-0'249			11	+4'355	-27'106			9	+59'269	-59'453		
9	+29'972	+55'680			9	-43'227	-7'541			18	+7'649	-49'822	66 3123	8'8	11	+60'322	-9'404		
15	+30'491	+25'119	65 3470	9'6	11	-43'099	-54'123			10	+8'752	-43'285			11	+61'606	-24'852		
15	+31'338	+32'208			18	-41'782	-47'549	66 3110	8'9	10	+9'469	-21'277			9	+64'351	-10'541		
9	+32'009	+42'987			10	-41'215	-23'524			11	+9'492	-24'111							
10	+32'272	+11'510			11	-40'722	-20'448			12	+9'495	-3'248							
11	+32'947	+41'380			19	-37'535	-12'253	66 3111	9'0	9	+9'955	-46'689							
	121					181					241								
14	+33'124	+22'019			12	-35'058	-32'135	66 3112	9'9	30	+10'839	-48'329	66 3124	8'2					
14	+33'416	+33'005			11	-34'128	-8'369			10	+11'254	-57'339							
10	+37'088	+53'669			16	-32'782	-4'274			9	+11'268	-55'653							
13	+39'001	+10'444			14	-32'769	-60'634	66 3113	9'5	11	+11'592	-2'452							
10	+39'065	+10'482	65 3471	9'8	18	-32'734	-4'232	66 3114	8'8	10	+14'119	-44'637							
15	+40'321	+7'961			11	-32'499	-27'067			12	+15'103	-24'497							
24	+40'804	+11'474	65 3472	8'5	12	-31'891	-41'455			10	+15'646	-45'653							
15	+42'008	+38'406	65 3473	9'6	9	-31'463	-45'436			13	+16'245	-32'174	66 3125	9'9					
9	+44'669	+61'711			9	-29'762	-40'331			27	+17'140	-5'817	66 3126	8'5					
9	+45'697	+52'698			9	-29'729	-57'263			9	+18'810	-48'439							
	131					191					251								
26	+45'860	+43'630	65 3475	8'6	10	-29'132	-14'879			28	+19'468	-27'818	66 3127	8'4					
19	+45'986	+58'756	65 3474	8'7	11	-26'018	-19'309			10	+20'072	-58'022							
11	+46'232	+8'641			11	-25'955	-17'061			9	+20'150	-30'262							
15	+46'536	+50'824	65 3476	9'6	9	-25'722	-53'841			12	+20'244	-19'285							
10	+46'728	+0'762			15	-24'484	-41'418	66 3115	9'6	12	+21'700	-14'136							
15	+46'931	+45'452	65 3477	9'9	11	-23'566	-34'617			13	+24'542	-34'062	66 3128	9'8					
24	+47'327	+31'280	65 3478	8'7	9	-23'470	-64'424			24	+24'909	-7'711	66 3129	8'2					
9	+47'612	+61'730			48	-23'108	-48'009	66 3116	7'2	13	+25'529	-44'176							
15	+49'417	+38'877	65 3479	9'9	9	-23'000	-60'676			10	+25'899	-1'962							
17	+49'611	+21'685	65 3480	9'3	10	-22'754	-19'697			11	+26'219	-27'582							
	141					201					261								
9	+49'788	+63'495			10	-22'650	-29'626			12	+26'246	-42'198							
10	+50'535	+56'534			12	-21'995	-3'560			9	+27'772	-29'917							
16	+50'920	+46'143	65 3481	9'3	9	-20'777	-31'675			19	+27'901	-38'562	66 3130	9'0					
9	+51'601	+56'624			16	-19'551	-5'518	66 3117	9'6	14	+29'427	-36'439							
10	+52'531	+40'411			12	-18'503	-57'648			10	+30'258	-35'926							
10	+56'496	+61'377			11	-18'357	-48'029			10	+31'691	-56'171							
9	+57'623	+15'781			10	-17'936	-33'822			12	+32'283	-46'502							
9	+57'863	+51'991			9	-17'450	-31'324			9	+32'889	-51'913							
11	+59'884	+3'255			10	-17'058	-29'182			13	+34'082	-47'641							
17	+60'011	+48'685	65 3482	9'0	11	-17'040	-29'499			10	+36'014	-26'240							
	151					211					271								
11	+62'271	+50'932	65 3483	9'9	11	-17'024	-19'227			13	+36'790	-23'426							
9	+63'183	+38'504			9	-15'838	-52'982			10	+38'239	-20'013							
10	+63'877	+46'913			10	-13'965	-37'559			11	+40'035	-18'256							
9	+64'232	+15'098			10	-13'946	-61'483			9	+40'106	-52'540							
13	-64'391	-28'400	66 3099	9'8	9	-13'779	-39'836			9	+40'196	-53'018							
12	-64'376	-21'147	66 3100	9'9	14	-8'081	-55'699	66 3118	9'6	9	+42'638	-50'035							
10	-64'098	-59'025	66 3097	9'9	13	-7'457	-41'192	66 3119	9'9	12	+43'516	-39'786							
9	-63'868	-51'961			11	-7'272	-63'292			10	+45'217	-17'446							
9	-63'303	-13'592			12	-6'665	-20'799			9	+45'775	-29'700							
21	-63'252	-12'232	66 3101	8'6	11	-6'493	-3'238			15	+47'323	-4'639	66 3131	9'9					
	161					221					281								
11	-63'062	-30'744			9	-5'270	-26'496			17	+48'174	-3'747	66 3132	9'5					
11	-60'978	-53'937	66 3102	9'8	10	-4'663	-19'941			11	+49'197	-18'322							
12	-57'865	-33'984	66 3103	9'9	12	-4'544	-41'246			11	+49'611	-7'081							
9	-54'401	-4'207			13	-3'381	-30'699	66 3120	9'9	10	+50'208	-5'215							
12	-54'045	-27'600	66 3104	9'9	12	-2'525	-51'725			12	+50'722	-2'870							
32	-52'926	-18'842	66 3105	8'3	19	-1'858	-60'370	66 3121	8'9	9	+50'982	-14'537							
20	-51'143	-10'100	66 3106	8'8	17	-1'757	-19'223	66 3122	9'6	11	+51'805	-4'809							
20	-49'186	-3'413	66 3108	8'8	11	-1'109	-14'430			13	+52'368	-5'123							
16	-48'468	-7'631	66 3109	9'3	9	-0'758	-23'291			10	+55'539	-56'251							
11	-48'177	-23'719			13	+1'164	-47'274			11	+55'549	-51'075							

RECTANGULAR CO-ORDINATES.

17^h 42^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.			
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.		
PLATE CENTRE. 17 ^h 42 ^m , - 66°. Plate 381. 1892, July 29. PROVISIONAL CONSTANTS. a = - .01138 d = - .00047 b = + .00010 e = - .01138 c = + .0254 f = - .1676 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																					
9	-64.519	+56.219	65 3479	9.9	11	-24.089	+50.288	65 3487	7.3	15	+18.283	+34.825	65 3515	9.4	9	+54.429	+64.982	64 3731	9.6		
15	-64.391	+38.536			36	-23.706	+28.531			9	+18.530	+49.478			11	+54.557	+41.507			65 3561	9.5
9	-64.379	+0.337			9	-22.902	+20.509			9	+18.651	+49.426			9	+54.861	+34.102			65 3562	10.2
9	-63.480	+56.391			10	-22.607	+59.179			9	+18.681	+46.920			9	+54.879	+29.764			65 3563	10.3
15	-63.410	+45.894	65 3481	9.3	9	-20.731	+54.492	65 3488	9.6	16	+18.958	+39.296	65 3518	9.2	10	+55.550	+64.281	64 3734	9.4		
16	-63.002	+21.417			9	-20.129	+7.034			9	+19.055	+32.792			9	+56.971	+64.647			64 3740	9.6
9	-61.964	+48.269			9	-19.882	+37.510			10	+19.589	+23.919			9	+57.585	+61.443			64 3742	10.0
9	-58.936	+61.478			9	-19.592	+60.282			16	+19.635	+57.237			11	+58.893	+54.725			65 3564	9.1
9	-57.199	+49.341	65 3480	9.3	9	-19.563	+17.179	65 3489	9.8	9	+19.671	+3.959	65 3521	10.2	10	+60.885	+19.487	65 3565	9.6		
9	-56.905	+52.229			9	-18.136	+38.939			9	+20.209	+5.565			14	+61.612	+38.707			65 3566	9.2
9	-54.577	+16.091			61	-16.613	+9.862			18	+20.832	+4.841			9	+64.453	+45.576			65 3569	10.0
16	-54.529	+49.092			10	-14.980	+59.305			11	+20.983	+13.519			10	+64.592	+52.727			65 3568	9.5
11	-52.437	+51.484	65 3483	9.9	9	-14.730	+12.254	65 3490	9.2	9	+21.916	+26.315	65 3524	10.3	9	+64.733	+63.523	64 3757	10.3		
14	-51.443	+3.774			9	-14.154	+49.402			10	+22.551	+37.639			9	-64.855	-50.627				
9	-50.667	+39.154			10	-13.847	+49.742			9	+23.334	+27.915			11	-64.694	-40.322				
10	-50.531	+47.594			9	-13.759	+39.095			9	+24.558	+3.902	9	-64.615	-17.922	66 3131	9.9				
9	-48.669	+42.318	9	-12.114	+62.512	10	+25.331			+25.455	13	-63.401	-4.995	66 3132	9.5						
9	-47.944	+15.897	15	-11.810	+58.359	48	+27.000			+18.677	15	-62.623	-4.050								
9	-47.146	+39.710	9	-10.954	+21.129	16	+28.385			+44.838	10	-60.952	-7.273								
16	-44.911	+23.453	16	-10.630	+14.166	9	+31.647	+30.412	10	-60.573	-18.522										
9	-43.146	+61.959	65 3484	9.6	10	-9.942	+52.656	65 3495	9.9	9	+31.747	+29.226	65 3531	10.3	9	-60.492	-5.373	66 3133	8.4		
9	-40.531	+22.561			16	-9.820	+18.055			9	+32.553	+3.608			11	-60.137	-2.991				
9	-39.373	+34.830			9	-9.372	+40.157			9	+32.597	+4.805			9	-59.048	-14.612				
15	-39.092	+30.702			17	-9.306	+41.779			11	+32.680	+15.751			10	-58.934	-4.850				
9	-38.070	+18.505	65 3484	9.6	9	-7.109	+20.485	65 3494	9.5	19	+32.722	+7.609	65 3534	9.0	12	-58.328	-5.115	66 3134	9.5		
9	-37.988	+47.414			9	-6.488	+51.053			9	+32.725	+1.825			9	-53.968	-17.598				
9	-37.972	+58.992			16	-5.211	+28.108			32	+33.029	+54.849			11	-52.008	-27.233				
9	-37.685	+49.104			10	-4.592	+1.438			9	+33.586	+59.688			10	-51.920	-50.733				
9	-37.456	+18.031	9	-3.712	+35.120	9	+33.870			+59.239	9	-51.544	-55.889								
9	-36.035	+51.030	15	-3.450	+21.089	9	+34.819			+2.345	26	-51.247	-46.644								
31	-34.349	+57.304	65 3484	9.6	81	-2.764	+24.029	65 3495	9.9	10	+35.532	+28.259	65 3538	9.9	9	-51.112	-20.380			66 3135	9.2
9	-34.038	+43.536			9	-1.664	+41.726			9	+36.173	+44.018			9	-50.105	-8.832				
9	-33.490	+49.787			11	-1.450	+62.116			14	+36.424	+1.743			9	-49.554	-17.781				
9	-33.406	+49.850			9	-0.970	+58.693			9	+37.832	+21.165			12	-47.714	-24.148				
12	-32.879	+60.505	9	-0.684	+29.408	9	+38.621			+16.183	9	-47.615	-52.962								
9	-32.496	+35.608	64 3665	9.8	9	+2.465	+45.103	65 3495	9.9	11	+39.255	+46.171	65 3540	9.6	9	-47.613	-58.827	66 3136	7.6		
9	-30.938	+53.008			15	+3.306	+49.526			9	+39.805	+60.178			10	-46.025	-9.665				
16	-30.730	+59.389			15	+3.504	+22.849			9	+40.032	+62.042			9	-45.358	-8.042				
9	-30.428	+46.271			9	+3.648	+31.558			14	+42.362	+53.980			12	-45.179	-5.094				
12	-29.278	+62.607	9	+4.118	+44.769	9	+42.997			+49.810	13	-43.961	-0.286								
15	-28.416	+57.780	65 3485	9.6	91	+4.874	+47.382	65 3501	10.3	9	+43.363	+13.327	65 3543	9.9	9	-42.966	-38.814			66 3137	9.2
9	-28.111	+9.031			10	+5.871	+1.318			10	+44.062	+16.360			9	-42.880	-26.043				
9	-27.990	+58.210			9	+7.757	+24.733			16	+44.097	+50.310			9	-40.416	-43.523				
9	-27.990	+58.210			9	+7.814	+13.136			10	+44.230	+24.434			18	-39.908	-26.879				
17	-26.279	+11.943	11	+7.936	+37.882	9	+44.488			+44.066	9	-38.100	-15.272								
9	-25.499	+48.852	64 3668	9.3	9	+8.172	+35.200	65 3502	9.9	9	+44.496	+5.641	65 3544	9.5	9	-38.100	-15.272	66 3138	7.6		
9	-25.170	+62.317			40	+8.226	+33.018			9	+46.447	+11.049			10	-42.880	-26.043				
16	-24.693	+64.326			9	+8.520	+44.846			9	+46.692	+3.296			9	-40.416	-43.523				
12	-24.295	+56.911			9	+9.094	+12.854			11	+47.016	+26.368			18	-39.908	-26.879				
9	-24.246	+11.038	65 3486	9.2	9	+9.779	+21.463	65 3508	10.3	9	+47.978	+58.254	65 3545	9.9	9	-38.100	-15.272			66 3139	7.6
15	-24.246	+11.038			101	+10.893	+37.916			9	+48.043	+1.678			9	-38.100	-15.272				
9	-24.246	+11.038			9	+11.510	+35.988			9	+48.522	+54.635			9	-38.100	-15.272				
9	-24.246	+11.038			9	+12.356	+13.529			9	+48.951	+46.110			9	-38.100	-15.272				
9	-24.246	+11.038	65 3486	9.2	13	+12.517	+40.300	65 3510	9.7	15	+49.842	+2.100	65 3546	9.9	9	-38.100	-15.272	66 3140	7.6		
9	-24.246	+11.038			20	+13.232	+8.537			10	+50.327	+19.192			9	-38.100	-15.272				
9	-24.246	+11.038			9	+14.528	+33.588			9	+51.972	+35.963			9	-38.100	-15.272				
9	-24.246	+11.038			9	+14.585	+3.947			16	+52.726	+13.888			9	-38.100	-15.272				
9	-24.246	+11.038	64 3668	9.3	10	+16.125	+24.911	65 3512	10.3	9	+52.787	+39.547	65 3547	10.3	9	-38.100	-15.272			66 3141	7.6
9	-24.246	+11.038			9	+16.339	+52.922			9	+53.097	+25.960			9	-38.100	-15.272				
9	-24.246	+11.038			9	+16.365	+28.669			9	+53.285	+23.362			9	-38.100	-15.272				
9	-24.246	+11.038			9	+16.365	+28.669			9	+53.285	+23.362			9	-38.100	-15.272				

C.P.D.					C.P.D.					C.P.D.					C.P.D.					
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	
	231,					291,				PLATE CENTRE. 18h 0m, - 66°. Plate 3948. 1915, July 13. PROVISIONAL CONSTANTS. a = - .01160 d = + .00004 b = + .00022 e = - .01121 c = + .0899 f = - .0360 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f						51,				
I4	-23°597	-15°486			9	+27°888	-63°887	67 3409	10°2						I2	-32°344	+42°918	65 3580	9°9	
9	-20°299	-53°197			9	+29°029	-21°195								19	-32°082	+30°133	65 3579	9°0	
12	-19°567	-15°266			9	+29°141	-10°150								9	-31°802	+6°895			
12	-18°557	-23°924			12	+30°195	-39°538	66 3168	9°8						9	-30°860	+42°839			
9	-16°238	-29°225			21	+30°247	-10°982	66 3167	8°4						10	-30°604	+36°375			
9	-15°923	-41°644			9	+31°575	-40°112	66 3169	10°3						15	-30°587	+59°339	65 3581	9°4	
9	-14°912	-10°643			11	+31°985	-41°216	66 3170	10°0						10	-30°080	+18°121			
11	-13°894	-15°321			9	+34°833	-58°482	66 3172	10°2						10	-29°388	+0°900			
24	-13°780	-46°102	66 3137	8°5	10	+35°021	-6°796	66 3171	10°0						18	-28°938	+30°808	65 3582	9°2	
14	-13°578	-64°878	67 3368	9°9	9	+35°721	-55°242	66 3173	10°0						11	-28°338	+27°614	65 3583	10°3	
	241					301										61				
11	-13°380	-7°750			10	+37°785	-21°839	66 3174	10°0	9	-64°723	+2°483			12	-27°767	+55°090	65 3584	9°7	
9	-13°196	-39°165			12	+39°378	-1°846	66 3175	9°7	10	-63°256	+0°978			20	-27°654	+50°399	65 3585	9°0	
14	-13°106	-8°038			11	+42°475	-36°329	66 3176	9°9	12	-62°229	+18°591	65 3555	10°2	11	-27°348	+37°071	65 3586	10°2	
9	-12°530	-39°927			14	+43°041	-27°845	66 3177	9°6	9	-61°811	+35°385	65 3556	10°3	16	-27°234	+51°835	65 3587	9°2	
11	-9°950	-35°730			9	+43°152	-42°858	66 3178	10°2	15	-61°489	+1°530	65 3554	9°5	16	-27°186	+58°346	65 3588	9°4	
9	-8°016	-1°862			9	+43°604	-33°335			9	-61°414	+11°086			9	-26°022	+38°165			
9	-7°369	-9°156			10	+43°970	-18°905	66 3179	10°2	14	-61°403	+64°580	64 3731	9°6	10	-25°974	+21°288			
9	-7°258	-14°510			9	+44°763	-8°718			10	-61°253	+39°093	65 3557	10°3	11	-25°626	+52°505	65 3590	10°0	
10	-6°907	-7°464			12	+45°078	-27°093	66 3180	9°8	9	-60°320	+34°764			9	-25°341	+10°092			
9	-6°700	-31°343			12	+45°962	-50°484	66 3182	9°5	15	-60°249	+63°934	64 3734	9°4	17	-25°051	+13°238	65 3589	9°5	
9	-6°320	-4°812				311				10	-59°946	+25°536	65 3559	10°2	10	-23°070	+24°734			
9	-5°763	-43°942			9	+47°080	-23°758	66 3183	10°3	13	-59°636	+41°158	65 3561	9°5	11	-22°854	+26°049	65 3591	10°3	
10	-5°712	-39°538			10	+48°350	-22°611	66 3185	10°0	11	-59°596	+22°975	65 3560	10°2	12	-22°376	+59°095	65 3592	9°9	
12	-5°425	-52°442			12	+48°504	-9°036	66 3184	9°7	19	-59°437	+13°008	65 3558	9°4	10	-22°190	+36°471			
9	-5°081	-62°018			11	+49°010	-13°500	66 3186	9°9	12	-58°875	+64°423	64 3740	9°6	11	-22°142	+21°957			
9	-3°749	-57°889	66 3138	10°3	9	+49°089	-26°213			11	-58°777	+33°799	65 3562	10°2	11	-20°461	+20°797	65 3593	10°3	
9	-3°234	-38°898	66 3139	10°3	15	+50°387	-47°083	66 3187	8°9	10	-58°443	+29°477	65 3563	10°3	9	-19°548	+26°185			
9	-2°360	-38°967	66 3140	10°3	15	+50°799	-37°708	66 3188	9°0	10	-58°059	+61°208	64 3742	10°0	10	-19°294	+26°080			
9	+1°416	-7°481	66 3141	10°2	10	+51°781	-33°739	66 3189	10°2	9	-56°905	+12°186			9	-19°117	+8°976			
12	+2°354	-30°653	66 3142	10°0	9	+52°021	-17°929			16	-56°220	+54°662	65 3564	9°1	11	-19°056	+14°235			
	261					321					21					81				
9	+3°141	-30°845	66 3143	10°3	10	+52°129	-21°540	66 3191	10°2	10	-55°081	+18°321			10	-18°804	+16°744			
12	+4°771	-48°848	66 3144	9°7	9	+52°237	-60°786	66 3193	10°0	16	-52°398	+38°881	65 3566	9°2	10	-18°522	+44°040	65 3595	10°3	
19	+5°002	-43°162	66 3145	8°6	10	+52°531	-8°403	66 3190	10°2	10	-51°952	+22°641			11	-18°472	+6°392			
12	+5°093	-7°806	66 3146	9°6	10	+52°755	-10°999	66 3192	10°3	16	-51°720	+19°649	65 3565	9°6	22	-18°441	+1°498	65 3594	9°0	
14	+5°806	-0°752	66 3147	9°4	9	+53°543	-52°616	66 3194	10°3	9	-51°035	+63°825	64 3757	10°3	11	-17°876	+43°646	65 3596	10°3	
16	+7°711	-0°228	65 3504	9°0	9	+53°849	-3°091			9	-50°748	+61°078			9	-16°935	+28°612			
9	+8°003	-64°531	67 3389	10°2	16	+54°619	-25°174	66 3195	9°2	13	-50°411	+53°054	65 3568	9°5	10	-16°695	+32°051			
14	+8°450	-59°917	66 3148	9°5	9	+55°328	-52°238	66 3196	10°3	11	-50°044	+45°900	65 3569	10°0	14	-16°682	+55°386	65 3598	9°7	
15	+9°220	-30°309	66 3149	9°6	12	+55°987	-42°849	66 3197	9°6	9	-47°516	+39°709			10	-16°604	+44°720			
9	+9°600	-25°815	66 3150	10°2	10	+57°336	-36°428	66 3199	10°0	11	-47°081	+13°840			36	-16°331	+28°766	65 3597	8°4	
	271					331					31					91				
9	+13°279	-8°288	66 3151	10°0	30	+57°559	-28°579	66 3198	8°0	10	-46°334	+9°673			10	-15°806	+19°672			
19	+14°123	-4°379	66 3152	8°5	15	+57°903	-34°846	66 3200	9°2	9	-40°306	+3°000			9	-14°827	+52°186			
9	+15°049	-17°693	66 3153	10°3	15	+59°656	-24°034	66 3202	9°0	9	-45°827	+18°504			11	-14°129	+3°665	65 3599	10°3	
10	+15°212	-20°004	66 3154	10°3	9	+59°691	-16°074	66 3201	10°2	10	-45°752	+54°840	65 3570	10°2	10	-13°688	+41°636			
20	+15°326	-62°898	67 3396	8°3	15	+60°391	-23°093	66 3204	9°1	9	-45°176	+8°332			12	-13°586	+18°588	65 3600	10°2	
9	+15°511	-22°715			9	+60°447	-2°415	66 3203	10°2	12	-44°811	+57°727	65 3571	9°9	9	-13°071	+48°268			
12	+15°595	-44°432	66 3155	9°7	9	+61°386	-23°374	66 3205	10°3	9	-44°530	+5°663			9	-11°956	+60°915			
10	+17°505	-17°689	66 3156	10°2	18	+61°793	-1°090	65 3567	9°0	9	-42°974	+34°590			9	-11°535	+22°717			
9	+17°957	-56°789								11	-42°909	+4°224			9	-11°487	+49°102			
15	+18°811	-61°674	67 3401	9°1						10	-41°951	+46°728	65 3572	10°3	9	-11°364	+26°508			
	281										41					101				
9	+20°406	-21°350	66 3157	10°3						42	-41°829	+54°688	65 3573	7°8						

RECTANGULAR CO-ORDINATES.

18° 0m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
11	- 6'469	+61'788	64 3800	10'3	10	+21'622	+ 5'591			17	+61'864	+31'594	65 3660	9'0	9	-30'438	-31'475		
9	- 6'457	+ 3'976			10	+21'649	+64'178	64 3829	10'3	10	+63'055	+45'282	65 3661	9'9	9	-30'300	- 9'318		
12	- 6'295	+24'475	65 3604	10'0	10	+22'067	+ 2'100			10	-64'972	-43'784	66 3178	10'2	12	-29'837	-57'553	66 3217	10'3
14	- 5'249	+ 1'730	65 3605	9'8	14	+22'642	+13'738	65 3630	9'9	34	-64'757	- 3'468	66 3181	8'6	9	-29'517	-35'903		
10	- 5'136	+32'069			9	+22'658	+39'046			12	-64'158	-27'943	66 3180	9'8	16	-28'002	-20'904	66 3220	9'5
10	- 4'452	+40'569	65 3606	10'3	9	+22'818	+48'269			9	-62'403	-24'455	66 3183	10'3	10	-27'917	-49'661	66 3219	10'3
9	- 4'115	+13'102			11	+22'835	+20'091	65 3631	10'3	13	-62'044	- 9'675	66 3184	9'7	10	-27'658	- 6'291		
12	- 3'003	+47'194	65 3607	10'3	10	+22'925	+44'922			14	-61'586	-51'206	66 3182	9'5	14	-27'650	-19'867	66 3221	9'7
9	- 2'589	+ 6'811			13	+23'126	+17'035	65 3633	9'9	11	-61'210	-23'230	66 3185	10'0	11	-27'609	-24'059		
9	- 2'126	+36'107			11	+23'278	+58'643	65 3632	10'2	14	-61'198	-14'090	66 3186	9'9	9	-27'552	-39'173		
	121					181					241					301			
16	- 1'945	+25'713	65 3608	9'6	13	+26'047	+48'962	65 3634	9'7	10	-60'214	-26'759			20	-25'926	-32'573	66 3222	9'2
9	- 1'028	+44'800			10	+26'189	+22'853			12	-58'068	- 8'771	66 3190	10'2	12	-24'692	-39'207	66 3224	10'2
20	- 0'440	+20'117	65 3609	9'1	11	+26'209	+17'272	65 3635	10'3	9	-57'904	-18'284			10	-24'604	-60'334	66 3223	10'3
9	- 0'204	+55'134			21	+26'540	+ 8'319	65 3637	8'9	20	-57'688	-38'108	66 3188	9'0	14	-23'798	-46'408	66 3225	9'8
11	- 0'125	+63'923	64 3812	10'3	22	+26'833	+55'600	65 3636	9'0	12	-57'643	-11'338	66 3192	10'3	12	-23'178	-40'480	66 3226	10'2
10	+ 0'136	+34'775			9	+27'240	+35'858			12	-57'520	-21'872	66 3191	10'2	9	-21'660	-10'168		
12	+ 1'243	+23'253	65 3610	10'2	21	+27'393	+49'656	65 3638	9'1	20	-57'434	-47'482	66 3187	8'9	11	-21'630	-64'836	67 3455	10'2
28	+ 2'099	+16'545	65 3611	8'8	14	+27'745	+62'801	64 3835	9'8	10	-57'113	- 3'364			10	-20'714	-49'974		
9	+ 2'298	+ 7'767			16	+27'885	+52'864	65 3639	9'2	11	-56'992	-34'083	66 3189	10'2	10	-20'297	-24'325		
22	+ 2'494	+53'201	65 3612	8'9	9	+29'031	+15'241			9	-56'271	-43'613			9	-20'166	-27'834		
	131					191					251					311			
11	+ 3'347	+50'395	65 3613	10'3	11	+29'082	+57'238			9	-55'369	- 4'898			16	-20'097	-56'293	66 3227	9'7
14	+ 3'781	+17'313	65 3614	9'8	10	+29'201	+15'281			21	-54'771	-25'329	66 3195	9'2	11	-19'848	-22'286	66 3228	10'3
20	+ 4'145	+46'437	65 3615	9'0	36	+29'314	+47'042	65 3640	7'9	10	-54'585	-61'008	66 3193	10'0	9	-19'598	-57'522		
21	+ 4'623	+15'357	65 3616	9'1	9	+29'447	+38'992			10	-53'875	-52'755	66 3194	10'3	12	-18'766	-22'376	66 3229	10'2
13	+ 5'258	+ 2'210	65 3617	9'8	9	+29'788	+37'008			14	-52'152	-42'867	66 3197	9'6	9	-18'707	-52'344		
11	+ 5'330	+25'025	65 3618	10'3	14	+33'143	+21'111	65 3641	9'7	10	-52'114	-52'272	66 3196	10'3	13	-18'224	-18'851	66 3230	9'9
9	+ 5'687	+38'909			10	+33'328	+61'416			36	-51'597	-28'524	66 3198	8'0	9	-18'124	-29'004		
9	+ 5'767	+44'569			12	+34'462	+39'580	65 3642	10'2	11	-51'269	-36'391	66 3199	10'0	9	-18'109	-29'489		
11	+ 6'036	+60'197			11	+34'968	+28'784			9	-51'070	- 3'069			11	-16'436	-58'060	66 3231	10'3
15	+ 6'181	+20'327	65 3619	9'6	9	+35'044	+ 2'804			9	-50'989	-31'770			9	-15'690	-28'759		
	141					201					261					321			
12	+ 7'130	+27'718	65 3620	10'2	10	+36'541	+46'844			20	-50'822	-34'738	66 3200	9'2	13	-15'598	-56'412	66 3232	9'9
11	+ 7'236	+39'476	65 3621	10'2	11	+36'636	+32'459	65 3643	10'3	13	-50'604	- 2'208	66 3203	10'2	9	-15'383	-32'592		
10	+ 7'269	+41'571			20	+36'829	+ 2'714	65 3644	9'2	11	-50'366	-15'902	66 3201	10'2	9	-14'577	-15'656		
9	+ 7'908	+37'951			13	+37'282	+63'295	64 3843	9'9	20	-49'844	-23'833	66 3202	9'0	10	-14'222	-31'469		
11	+ 8'213	+20'991	65 3622	9'9	15	+38'126	+23'675	65 3645	9'6	9	-49'758	-16'607			9	-14'027	- 6'202		
11	+ 8'792	+ 7'026	65 3623	10'3	12	+38'274	+12'982	65 3646	10'0	22	-49'357	- 0'794	65 3567	9'0	9	-13'764	-22'874		
9	+ 9'360	+23'995			12	+39'191	+ 8'825	65 3647	9'9	18	-49'172	-22'841	66 3204	9'1	9	-13'525	-20'927		
10	+ 9'536	+27'016			17	+39'815	+35'504	65 3648	9'1	11	-48'143	-23'049	66 3205	10'3	18	-12'979	-15'987	66 3233	9'4
9	+ 9'934	+14'731			10	+42'152	+44'418	65 3649	10'3	11	-46'029	-23'831			10	-12'227	-61'662	67 3465	10'2
10	+10'337	+22'980			21	+42'462	+14'892	65 3650	9'0	23	-45'596	- 6'160	66 3206	8'8	11	-11'187	- 9'759		
	151					211					271					331			
9	+11'156	+43'001			10	+42'560	+25'619			9	-44'818	-19'097			17	-10'491	- 2'850	66 3234	9'6
19	+11'316	+ 9'546	65 3624	9'2	9	+43'635	+19'721			16	-44'337	-18'710	66 3207	9'6	11	-10'079	-20'768		
9	+12'168	+17'252			9	+44'709	+ 3'865			11	-44'226	-26'573			12	- 9'827	-57'408	66 3235	10'2
9	+12'221	+50'990			9	+45'360	+ 7'687			12	-44'226	-10'260	66 3208	10'3	13	- 9'592	- 7'162	66 3236	9'8
10	+13'541	+56'088			9	+46'242	+23'219			9	-43'683	-21'123			14	- 9'473	-16'798	66 3237	9'6
10	+13'661	+60'615			10	+46'452	+50'206			11	-41'561	-23'597	66 3210	10'3	15	- 9'085	-44'626	66 3238	9'5
9	+15'099	+25'993			12	+47'552	+ 6'513	65 3651	10'0	11	-41'366	-61'529	67 3441	10'0	12	- 9'043	-44'274	66 3239	10'0
17	+16'054	+49'192	65 3625	9'4	14	+48'219	+60'340	64 3854	9'7	11	-41'332	-43'387	66 3209	10'2	13	- 8'939	- 8'334	66 3240	9'9
9	+16'196	+52'106			11	+48'587	+ 6'403	65 3652	10'2	9	-40'714	-20'103			12	- 7'766	- 5'490	66 3241	9'9
9	+18'024	+16'879			9	+49'084	+ 0'995			36	-40'530	-32'921	66 3211	8'0	15	- 7'137	- 1'457	66 3243	9'5
	161					221					281					341			
9	+18'329	+10'811			16	+50'152	+20'087	65 3653	9'4	20	-39'705	- 6'247	66 3212	9'1	18	- 6'937	-42'484	66 3242	9'4
9	+18'452	+38'400			9	+50'301	+21'726			14	-38'884	-27'816	66 3213	9'8	9	- 5'902	- 3'515		
11	+18'622	+42'974			9	+51'482	+21'369			11	-37'894	- 4'854	66 3214	10'3	11	- 5'519	-21'981	66 3244	10'2
12	+19'644	+15'862	65 3626	10'0	12	+54'376	+28'549	65 3654	10'0	10	-36'920	-61'475	67 3443	10'3	11	- 5'374	-14'877	66 3245	10'2
30	+20'099	+15'695	65 3627	8'5	14	+55'215	+51'645	65 3655	9'4	9	-36'270	-64'047	67 3444	10'3	12	- 4'617	-11'020	66 3246	10'2
10	+20'589	+ 8'734			10	+57'056	+ 4'731			12	-34'170	-49'519	66 3215	9'8	12	- 4'600	- 7'528	66 3247	10'0
11	+20'664	+39'204	65 3628	10'2	11	+59'145	+28'549	65 3656	10'2	10	-33'584	-26'330			10	- 3'934	- 9'552		
10	+20'793	+56'957			10	+59'175	+ 9'350	65 3657	10'3	9	-31'323	-25'801			10	- 3'328	-20'151		
18	+21'095	+46'396			14	+61'181	+34'560	65 3658	9'4	18	-30'896	- 6'477	66 3218	9'4	10	- 3'069	-50'593		
16	+21'195	+46'372	65 3629	9'0	13	+61'457	+35'779	65 3659	9'4	12	-30'694	-51'115	66 3216	10'0	9	- 1'807	-47'213		

18h 0m, - 66°

RECTANGULAR CO-ORDINATES.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
351,					411,					PLATE CENTRE.					51,				
26	- 1'177	-38'066	66 3248	8'8	12	+28'239	-64'894	67 3493	9'8	18h 18m, - 66°.					9	-37'007	+ 0'274		
12	- 1'120	-16'751	66 3249	10'0	34	+28'821	-51'226	66 3281	8'4	Plate 4089. 1917, Aug. 27.					14	-36'970	+20'013	65 3669	9'9
10	- 1'028	- 9'367	66 3250	10'2	9	+29'052	-31'988			PROVISIONAL CONSTANTS.					13	-36'800	+35'425	65 3670	10'0
9	- 0'988	- 9'392			15	+29'267	-28'089	66 3282	9'8	a = - '01145 d = - '00055					11	-36'415	+ 0'169		
10	- 0'772	- 8'958			10	+30'249	-51'553	66 3283	10'3	b = + '00059 e = - '01172					10	-35'770	+33'767		
12	- 0'468	-38'413	66 3251	10'2	22	+31'600	-15'894	66 3284	9'0	c = - '0015 f = + '0646					9	-35'484	+43'442		
11	- 0'051	-52'458	66 3252	10'3	9	+32'313	- 7'739			To obtain standard co-ordinates, ξ, η					11	-35'318	+31'237		
13	+ 2'325	-61'377	67 3472	9'7	9	+33'437	-29'682			$\xi = x + ax + by + c$					18	-33'939	+32'047	65 3671	9'4
10	+ 2'663	-63'276			9	+33'644	-19'378			$\eta = y + dx + ey + f$					13	-33'918	+43'284	65 3672	10'0
11	+ 2'798	-12'947			10	+34'947	-26'913	66 3285	10'3						9	-33'631	+23'472		
361					421										61				
15	+ 3'419	-60'805	67 3473	9'4	10	+35'375	-61'917	67 3500	10'2	15	-63'958	+ 5'787	65 3651	10'0	12	-33'132	+17'799		
10	+ 4'627	-55'205	66 3253	10'3	9	+35'445	-56'111			11	-62'906	+ 5'753	65 3652	10'2	9	-33'050	+30'713		
9	+ 5'241	-25'254			9	+35'748	-20'823			12	-62'326	+19'495	65 3653	9'4	9	-33'026	+43'196		
20	+ 5'460	-25'128	66 3254	9'0	9	+36'146	-24'073			11	-62'307	+21'141			10	-32'561	+40'625		
10	+ 5'934	-10'706			9	+37'190	-24'325			10	-62'027	+ 0'385			9	-31'912	+38'921		
23	+ 6'767	-45'887	66 3255	8'9	9	+37'279	-30'808	66 3286	10'3	10	-61'104	+20'876			12	-31'817	+10'317		
9	+ 8'257	-29'331			12	+37'816	-12'512	66 3287	10'2	9	-59'723	+53'502			13	-31'449	+46'472	65 3673	10'0
9	+ 8'397	-60'247			11	+38'478	-24'403			16	-59'569	+51'360	65 3655	9'4	9	-31'175	+47'178		
15	+ 8'609	-26'346	66 3256	9'5	10	+39'622	-20'093			13	-58'738	+28'248	65 3654	10'0	10	-31'051	+55'630		
9	+ 9'291	-14'748			9	+39'751	-18'788			10	-55'691	+46'244			9	-30'927	+54'353		
371					431										71				
11	+ 9'464	-20'481	66 3257	10'3	12	+39'754	-45'194	66 3288	10'0	11	-54'371	+ 4'684			9	-30'798	+29'834		
11	+ 9'780	-54'833	66 3258	10'3	12	+40'162	-39'660	66 3289	9'7	14	-53'990	+28'600	65 3656	10'2	10	-30'489	+ 1'508		
11	+10'352	-39'013	66 3259	10'3	10	+40'165	-57'776	66 3290	10'0	12	-52'579	+ 9'453	65 3657	10'3	10	-30'471	+34'443		
18	+11'188	-32'397	66 3260	9'2	18	+41'483	-22'971	66 3291	9'4	18	-52'398	+34'733	65 3658	9'4	12	-29'946	+44'362		
9	+11'215	-27'580			14	+42'426	-18'020	66 3292	10'0	17	-52'202	+35'901	65 3659	9'4	12	-29'871	+40'402		
9	+11'410	-46'327			10	+42'972	- 2'470			20	-51'490	+31'829	65 3660	9'0	10	-29'712	+28'428		
12	+12'148	-33'623	66 3261	10'3	9	+43'090	-43'654			12	-51'307	+45'575	65 3661	9'9	11	-29'342	+ 6'489		
14	+12'171	-28'794	66 3262	9'6	12	+43'145	-33'731	66 3293	9'8	10	-50'774	+16'099			12	-29'104	+53'393	65 3677	10'0
11	+12'410	-12'394			15	+44'118	-42'418	66 3294	9'5	14	-50'255	+62'950	64 3866	9'5	21	-28'938	+16'810	65 3674	9'1
9	+12'778	-34'537			13	+44'856	-35'467	66 3295	9'7	11	-49'453	+35'350			13	-28'762	+ 9'017	65 3675	10'2
381					441										81				
12	+12'913	-54'879	66 3263	10'3	9	+45'555	-53'859			11	-48'490	+49'548			22	-28'380	+ 3'716	65 3676	9'1
9	+13'815	-60'219			9	+47'729	- 0'440			9	-48'276	+16'185			10	-27'300	+23'292		
10	+15'047	-36'624			9	+47'742	-11'316			9	-47'485	+37'673			13	-26'727	+30'432	65 3678	10'2
9	+15'586	-47'625			9	+48'614	-24'568			12	-47'447	+43'312	65 3662	10'2	11	-26'482	+58'924	65 3679	10'3
12	+16'338	- 6'921	66 3264	10'0	14	+49'920	-37'318	66 3296	9'4	11	-46'953	+21'800			11	-26'469	+61'448	64 3884	10'3
10	+16'530	-22'697			10	+51'311	- 6'452			10	-46'653	+24'050			10	-26'257	+11'171		
12	+16'585	-36'058	66 3265	10'0	13	+53'276	-16'847	66 3297	10'2	10	-46'346	+ 8'960			11	-25'810	+58'034	65 3680	10'3
11	+16'725	- 9'547	66 3266	10'3	10	+54'272	-40'227	66 3298	10'3	10	-46'075	+35'781			12	-25'102	+48'608	65 3681	10'3
9	+17'583	-24'619			10	+55'535	-50'427	66 3299	10'0	9	-44'698	+31'651			10	-24'811	+19'482		
17	+17'999	-42'011	66 3267	9'4	10	+56'464	-43'901	66 3300	10'2	11	-44'547	+38'439	65 3663	10'3	9	-24'124	+36'260		
391					451										91				
11	+18'337	-52'759	66 3268	10'3	44	+57'046	-42'917	66 3301	8'1	11	-44'216	+ 1'902			9	-23'962	+36'468		
9	+18'906	- 1'709			12	+58'403	- 9'960	66 3302	10'0	9	-43'874	+ 6'061			10	-23'945	+33'118		
13	+20'381	-42'338	66 3269	10'2	25	+58'432	-29'800	66 3303	8'9	9	-43'845	+10'940			12	-23'427	+43'308	65 3682	10'3
10	+20'544	-60'096			10	+59'771	- 7'614			11	-43'548	+42'538			9	-22'959	+28'528		
11	+20'874	-31'297	66 3270	10'3	10	+60'107	-62'216	67 3514	9'8	22	-43'253	+35'031	65 3664	9'0	13	-22'192	+22'918	65 3683	10'3
10	+21'514	- 8'470			16	+60'390	-17'039	66 3304	9'4	14	-42'980	+60'776	64 3869	9'6	9	-22'024	+34'887		
20	+21'957	-39'171	66 3271	9'1	11	+60'513	-15'649	66 3305	10'2	11	-42'812	+19'711			9	-21'203	+39'827		
12	+22'452	-22'511	66 3272	10'2	9	+61'713	-10'477			9	-42'409	+30'505			11	-21'057	+ 2'854		
19	+22'730	-10'488	66 3273	9'4	9	+62'018	-26'932	66 3306	10'3	12	-42'139	+25'816	65 3665	10'3	18	-20'981	+46'453	65 3685	9'6
10	+24'266	-63'106	67 3488	10'3	9	+62'280	-47'322	66 3308	10'3	9	-41'980	+ 9'362			26	-20'784	+32'104	65 3684	8'7
401					461										101				
26	+25'147	-43'361	66 3274	8'8	12	+63'366	- 8'290	66 3307	9'2	12	-41'834	+61'389	64 3871	10'2	9	-20'733	+56'994		
14	+25'322	-26'967	66 3275	9'9	24	+63'938	-14'107	66 3310	9'0	10	-41'513	+31'373			10	-20'588	+58'845		
13	+25'554	- 4'324	66 3276	10'3	15	+64'028	- 3'326	66 3309	9'6	9	-41'421	+ 1'976			10	-20'554	+39'439		
12	+25'987	-33'872	66 3277	9'9	16	+64'773	-11'395	66 3311	9'4	16	-40'303	+10'056	65 3666	9'9	12	-20'539	+10'821		
23	+26'024	-43'986	66 3278	9'1						9	-40'266	+26'650			9	-20'523	+40'764		
10	+26'123	-37'561								18	-40'127	+22'539	65 3667	9'5	10	-19'315	+ 5'958		
14	+26'349	-46'658	66 3279	9'7						10	-40'039	+31'125			9	-18'138	+24'642		
44	+26'884	-51'099	66 3280	7'0						10	-39'366	+20'807			11	-18'081			

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
9	-16°842	+17°786			18	+2°877	+23°349	65 3707	9°7	12	+29°514	+30°346			11	+57°072	+32°254		
12	-16°716	+9°318			11	+3°264	+20°617	65 3708	10°3	10	+30°046	+12°304			16	+57°916	+50°445		
10	-16°267	+34°859			19	+4°453	+49°012	65 3709	9°4	11	+30°236	+54°912			9	+57°974	+8°362		
9	-16°154	+16°674			11	+5°094	+5°270			17	+30°486	+9°293	65 3729	9°7	12	+58°372	+48°373		
9	-16°142	+40°348			12	+6°371	+40°451			12	+31°249	+53°151	65 3730	10°3	12	+60°780	+17°328		
11	-15°879	+1°957			9	+6°787	+47°466			42	+31°356	+40°388	65 3731	7°3	11	+61°151	+53°739		
9	-15°878	+24°667			42	+7°011	+45°686	65 3710	7°8	12	+32°280	+6°460			9	+61°209	+23°927		
10	-15°313	+56°898			9	+7°124	+28°244			20	+32°511	+13°018	65 3732	9°7	12	+61°327	+13°559		
9	-15°224	+54°887			9	+7°411	+44°600			12	+32°901	+13°856	65 3733	10°3	14	+61°343	+14°545		
20	-14°916	+35°945	65 3686	9°2	10	+8°065	+37°135			9	+33°324	+5°405			14	+61°670	+52°620		
10	121				24	+8°374	+40°407	65 3711	8°7	9	+34°120	+3°638			11	+63°564	+57°093		
19	-14°296	+41°816	65 3688	9°4	11	+8°507	+24°179			10	+34°271	+16°910			12	+64°425	+48°415		
20	-13°984	+43°396	65 3687	9°4	16	+9°342	+54°536	65 3712	9°8	15	+34°548	+27°623	65 3735	10°2	20	+64°694	+51°980	65 3743	8°8
11	-13°749	+42°911			10	+9°706	+34°620			13	+34°809	+42°946	65 3734	9°7	14	+64°995	+33°200		
11	-13°744	+16°354			20	+10°224	+27°643	65 3713	9°5	11	+35°216	+43°488			9	-64°783	-44°584		
11	-13°242	+43°606			13	+10°449	+27°299	65 3714	10°3	13	+35°383	+31°007	65 3736	10°2	16	-63°858	-43°296	66 3294	9°5
11	-13°226	+7°625			10	+10°693	+41°159			11	+36°082	+11°239			14	-63°623	-36°287	66 3295	9°7
14	-12°239	+33°033	65 3690	10°3	14	+10°986	+10°741	65 3715	10°0	9	+37°244	+59°668			11	-63°264	-1°138		
22	-12°196	+6°068	65 3689	9°1	11	+11°109	+14°381			15	+38°627	+1°828	65 3738	10°0	9	-62°482	-11°996		
10	-11°969	+50°151			10	+11°153	+31°082			10	+39°110	+16°671			10	-61°612	-54°574		
12	131				11	191				11	251				9	311			
12	-11°923	+40°502			10	+11°211	+9°781			14	+39°139	+25°038	65 3737	9°7	9	-61°307	-4°372		
12	-11°819	+41°207			10	+11°316	+35°974			12	+39°367	+47°497			9	-61°009	-42°307		
9	-10°986	+34°729			12	+11°398	+2°738	65 3716	10°3	12	+39°422	+4°212			10	-60°636	-25°155		
9	-10°912	+31°041			9	+11°750	+61°213			9	+39°678	+56°910			12	-59°270	-6°885		
12	-10°889	+53°530			10	+12°080	+41°112			9	+40°983	+16°285			18	-58°436	-37°769	66 3296	9°4
10	-10°841	+43°626			9	+12°827	+0°624			10	+41°712	+16°099			9	-57°230	-23°717		
10	-10°416	+56°331			12	+13°333	+60°614			10	+42°114	+9°273			14	-56°562	-17°100	66 3297	10°2
13	-9°821	+48°978	65 3691	10°3	10	+13°433	+51°748			13	+42°188	+28°353			10	-55°575	-42°344		
10	-9°387	+25°557			9	+13°512	+9°878			11	+42°243	+22°411			9	-55°226	-25°718		
13	-8°498	+11°550	65 3692	10°2	11	+13°736	+12°827	65 3717	10°3	9	+42°974	+4°781			10	-54°835	-41°545		
17	141				11	201				10	261				9	321			
13	-8°317	+51°779	65 3693	9°7	11	+14°086	+14°386			10	+43°154	+59°344			9	-54°821	-28°258		
18	-7°902	+17°025	65 3694	10°2	18	+14°120	+17°430	65 3719	9°4	9	+43°790	+10°354			9	-54°473	-7°981		
18	-7°742	+15°211	65 3695	10°0	18	+14°161	+45°946	65 3718	9°5	22	+44°183	+41°002	65 3739	8°8	11	-53°885	-40°363	66 3298	10°3
9	-7°459	+43°762			9	+14°162	+14°891			11	+44°535	+21°438			9	-53°517	-6°587		
9	-7°241	+9°941			11	+14°540	+27°101			13	+44°674	+0°901			10	-52°109	-4°285		
9	-6°979	+61°674			11	+14°676	+6°665			10	+45°401	+45°294			9	-51°972	-16°179		
16	-6°904	+38°449	65 3696	9°7	17	+14°677	+15°384	65 3720	9°9	9	+45°755	+29°411			13	-51°949	-9°870	66 3302	10°0
13	-6°347	+1°363	65 3697	10°3	13	+15°217	+49°985	65 3721	10°2	10	+45°796	+60°093			11	-51°909	-50°440	66 3299	10°0
11	-6°287	+40°632			9	+15°697	+21°929			10	+46°012	+41°466			12	-51°443	-43°867	66 3300	10°2
13	-6°175	+9°961	65 3698	10°2	9	+16°022	+18°974			10	+46°190	+4°069			40	-50°934	-42°843	66 3301	8°1
11	151				11	211				12	271				11	331			
13	-6°012	+34°131	65 3700	10°0	11	+16°023	+25°033			14	+46°389	+23°939			24	-50°772	-7°431		
18	-5°768	+36°937	65 3699	9°6	10	+16°270	+5°846			10	+46°798	+11°490			9	-50°493	-29°653	66 3303	8°9
11	-5°614	+54°771	65 3701	10°3	10	+16°404	+16°424			10	+47°227	+40°038			9	-49°710	-41°305		
11	-4°442	+50°315			11	+16°599	+0°029			12	+48°372	+60°335			18	-49°462	-16°788	66 3304	9°4
14	-4°359	+11°344	65 3702	9°9	13	+16°647	+25°251	65 3722	10°3	9	+48°638	+31°836			13	-49°444	-15°388	66 3305	10°2
10	-4°090	+46°999			13	+18°947	+31°864	65 3723	10°2	14	+49°045	+17°933			11	-48°623	-10°142		
20	3°235	+2°920	65 3703	9°1	14	+20°125	+12°768	65 3724	10°0	11	+50°455	+55°288			9	-47°805	-3°267		
12	-3°186	+21°531			9	+21°428	+10°378			9	+50°670	+17°820			10	-47°447	-4°089		
12	-3°085	+36°253			12	+23°110	+30°160			10	+50°688	+3°106			11	-47°134	-26°538	66 3306	10°3
161					11	+23°763	+40°509			22	+51°500	+22°943	65 3740	8°9	12	-47°131	-7°840	66 3307	9°2
9	-2°945	+44°851			9	+25°203	+46°800			13	+53°184	+34°024			18	-46°813	-2°853	66 3309	9°6
13	-1°733	+19°173	65 3704	10°2	17	+25°661	+47°870	65 3725	9°5	20	+53°800	+24°303	65 3741	9°0	10	-46°534	-8°383		
10	-1°595	+53°375			19	+25°967	+32°450	65 3726	9°6	14	+54°655	+2°761			13	-46°511	-61°843	67 3514	9°8
9	-0°590	+55°289			14	+25°994	+3°906	65 3727	10°3	10	+54°831	+25°179			22	-46°135	-13°608	66 3310	9°0
9	-0°339	+36°248			11	+26°581	+2°508			10	+55°168	+58°437			10	-46°082	-39°094		
13	+1°207	+47°332	65 3705	10°2	12	+26°876	+2°960			12	+55°255	+11°859			20	-45°488	-10°846	66 3311	9°4
14	+2°008	+34°223	65 3706	9°9	9	+27°088	+6°813			10	+55°678	+19°162			11	-45°399	-46°853	66 3308	10°3
9	+2°085	+43°556			13	+27°828	+13°266			10	+55°848	+11°303			12	-45°008	-2°283	66 3312	10°3
10	+2°446	+52°419			20	+28°580	+8°280	65 3728	9°4	20	+56°037	+8°484	65 3742	9°3	9	-43°914	-55°736		
9	+2°606	+56°474			11	+28°931	+47°938			11	+56°359	+37°084			18	-43°700	-23°001	66 3313	9°4

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					471,					531,			
9	-43'289	-1'653			10	-15'464	-48'670			10	+16'704	-47'304			13	+41'114	-49'688		
11	-43'237	-8'327			10	-14'174	-27'977			11	+16'998	-44'412			10	+41'800	-0'243		
17	-43'195	-8'305	66 3315	9'6	23	-13'363	-43'067	66 3339	9'0	12	+17'181	-46'813			24	+42'461	-15'650	66 3382	8'5
12	-42'573	-21'011	66 3316	10'3	9	-13'273	-55'972			11	+18'447	-37'150			9	+42'590	-28'589		
13	-42'467	-32'163	66 3314	10'2	10	-12'958	-11'677			30	+18'742	-31'079	66 3363	8'2	9	+43'116	-53'681		
10	-42'102	-17'020			9	-12'253	-53'842			11	+18'839	-50'517			9	+43'537	-61'459		
22	-42'089	-1'377	66 3317	8'9	14	-11'366	-32'362	66 3340	9'9	10	+19'181	-16'671			10	+43'609	-57'844		
11	-42'012	-42'337			13	-11'206	-6'820	66 3341	10'2	9	+19'203	-9'705			17	+43'654	-61'872	67 3577	9'3
17	-39'537	-43'816	66 3318	9'2	12	-11'106	-16'595			12	+19'321	-21'946	66 3364	10'3	9	+43'933	-0'003		
13	-39'176	-48'203	66 3319	9'9	10	-10'948	-46'769			9	+19'684	-22'412			11	+45'042	-22'299		
	361					421					481					541			
10	-39'016	-52'410			12	-9'850	-50'533	66 3342	10'3	9	+20'174	-22'173			9	+45'519	-45'510		
13	-38'312	-8'797	66 3320	10'2	9	-9'226	-1'960			14	+20'344	-50'501	66 3366	9'6	9	+45'901	-5'897		
12	-37'574	-23'979			13	-8'489	-42'072	66 3343	10'2	12	+20'355	-35'871	66 3365	10'2	10	+46'128	-26'929		
9	-36'515	-3'892			9	-7'968	-14'772			12	+20'654	-12'064	66 3367	10'3	9	+46'198	-16'598		
11	-34'727	-14'330			11	-7'685	-40'024			18	+20'700	-9'051	66 3368	9'5	12	+46'649	-2'790		
26	-34'571	-9'396	66 3321	8'7	21	-7'599	-16'436	66 3344	8'8	9	+20'867	-30'674			12	+47'642	-42'819		
16	-34'353	-18'069	66 3322	9'9	12	-7'364	-18'317	66 3345	10'3	12	+21'231	-36'447			11	+47'668	-41'786		
12	-34'220	-34'688			9	-7'233	-50'625			14	+21'389	-3'514	66 3369	10'0	13	+48'409	-52'450		
14	-33'927	-24'261	66 3323	10'0	11	-6'569	-59'246	66 3346	10'3	9	+22'010	-8'607			32	+49'314	-59'371	66 3383	8'3
9	-33'850	-4'172			15	-5'783	-59'950	66 3347	9'6	9	+22'146	-17'878			10	+51'338	-2'351		
	371					431					491					551			
11	-33'391	-43'819	66 3324	10'3	14	-5'416	-22'491	66 3349	9'9	10	+22'403	-47'109			11	+51'571	-59'650		
12	-32'923	-11'446	66 3325	10'3	12	-5'409	-50'963	66 3348	10'0	12	+22'522	-49'754	66 3370	10'3	12	+55'101	-35'759		
10	-32'531	-43'969			13	-5'332	-23'160	66 3350	9'9	10	+23'388	-6'234			13	+56'041	-15'783		
9	-31'800	-6'330			10	-4'728	-6'530			11	+23'400	-15'494			11	+57'997	-1'713		
9	-31'506	-5'848			10	-4'045	-19'625			9	+23'400	-9'451			10	+59'812	-19'869		
12	-31'010	-21'209			9	-3'182	-47'692			17	+23'715	-32'552	66 3371	0'8	10	+60'019	-19'018		
11	-30'729	-63'045	67 3523	10'3	9	-3'155	-6'648			12	+24'433	-40'918			9	+62'098	-36'539		
9	-29'726	-30'828			11	-2'481	-53'167	66 3351	10'3	18	+24'618	-4'362	66 3372	9'5	9	+62'303	-31'570		
12	-29'419	-58'265	66 3326	10'2	9	-2'230	-38'278			12	+26'038	-25'980	66 3373	10'3	13	+63'001	-52'432		
10	-28'924	-11'229			13	-2'081	-9'542	66 3352	10'2	9	+26'143	-22'821							
	381					441					501								
9	-28'712	-28'862			11	-1'994	-20'714			11	+26'766	-15'548							
9	-27'823	-36'771			10	-1'246	-59'203			11	+26'802	-56'730							
17	-27'785	-1'196	66 3327	9'8	20	-0'691	-31'308	66 3353	9'0	12	+27'093	-41'044	66 3374	10'3					
12	-26'819	-35'955			11	-0'234	-37'384			10	+27'187	-6'807							
11	-26'763	-37'117			11	+0'785	-60'295	67 3543	10'3	9	+27'453	-41'891							
9	-26'504	-25'372			11	+2'075	-16'953			14	+27'838	-13'627	66 3375	10'2					
9	-26'191	-30'699			19	+2'835	-22'598	66 3354	9'2	12	+29'248	-36'257	66 3376	10'3					
19	-25'894	-44'443	66 3328	9'1	10	+4'274	-45'885			9	+29'305	-35'924							
12	-25'725	-39'015			11	+5'199	-44'264			9	+30'537	-12'477							
13	-25'453	-1'499			16	+5'568	-8'203	66 3355	9'7	11	+30'572	-43'001							
	391					451					511								
13	-25'244	-31'083	66 3329	10'3	12	+6'395	-58'053	66 3356	10'0	14	+30'997	-8'637	66 3377	10'2					
10	-25'205	-59'081			18	+6'554	-37'870	66 3357	9'1	13	+31'084	-59'113	66 3378	10'3					
10	-25'100	-53'241			10	+6'886	-57'579			9	+32'127	-22'024							
21	-23'976	-40'674	66 3330	9'1	10	+7'990	-2'290			13	+32'604	-22'163	66 3379	9'9					
9	-23'525	-17'183			23	+8'612	-54'611	66 3358	8'9	11	+33'630	-48'067							
32	-22'899	-56'759	66 3331	8'6	11	+8'627	-51'259			10	+34'380	-42'888							
10	-21'655	-3'586			13	+8'763	-20'931	66 3359	10'2	11	+35'725	-30'404							
20	-21'644	-53'587	66 3332	9'1	19	+9'770	-40'909	66 3360	9'2	13	+36'233	-15'829							
16	-20'078	-12'284	66 3333	9'7	9	+10'687	-27'365			12	+36'626	-47'978							
10	-19'052	-61'850			10	+11'011	-22'923			9	+36'785	-4'492							
	401					461					521								
9	-16'382	-12'981			9	+11'244	-36'802			42	+37'014	-21'709	66 3380	7'7					
10	-16'112	-38'455			10	+11'266	-54'321			14	+38'044	-8'915							
12	-16'065	-12'637	66 3335	10'3	44	+12'309	-60'597	67 3553	7'6	11	+38'270	-0'229							
11	-16'051	-39'171			9	+12'403	-31'015			14	+39'543	-15'229							
13	-16'030	-39'199	66 3334	9'6	9	+12'946	-37'419			13	+40'174	-42'256							
18	-15'949	-8'458	66 3336	9'7	13	+14'261	-22'813	66 3361	10'3	10	+40'527	-6'181							
9	-15'905	-27'497			9	+15'764	-59'900			11	+40'596	-22'483							
14	-15'722	-8'636	66 3337	10'2	9	+16'276	-41'821			22	+40'925	-2'037	66 3381	8'7					
14	-15'673	-6'970	66 3338	10'2	14	+16'435	-5'821	66 3362	10'2	18	+40'930	-1'988							
9	-15'571	-41'836			9	+16'569	-54'163			10	+40'976	-43'312							

RECTANGULAR CO-ORDINATES.

18° 36', - 66°

C.P.D.					C.P.D.					C.P.D.					C.P.D.						
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.		
PLATE CENTRE.																					
18h 36m, - 66°.																					
Plate 3957. 1915, Aug. 3.																					
PROVISIONAL CONSTANTS.																					
a = - .01149 d = - .00092																					
b = + .00105 e = - .01137																					
c = - .0319 f = - .0178																					
To obtain standard co-ordinates, ξ, η																					
$\xi = x + ax + by + c$																					
$\eta = y + dx + ey + f$																					
9	-64'620	+54'754	65 3740	8'9	II	51,	-37'689	+1'562	65 3747	9'3	20	111,	-6'805	+26'573	65 3750	9'6	12	171,	+26'826	+12'567	
II	-63'365	+17'410			10	-37'277	+52'181	10			-6'566	+11'159	16	+26'990			+11'886				
24	-61'269	+22'577			9	-37'242	+38'601	11			-5'026	+26'969	9	+27'569			+40'253				
9	-60'649	+2'724			9	-36'572	+48'625	23			-4'980	+48'323	9	+27'658			+13'380				
12	-60'392	+33'744			II	-36'563	+29'073			12	-4'009	+2'986			10	+27'700	+9'879				
9	-60'164	+58'233	65 3741	9'0	12	-35'227	+52'773	65 3747	9'3	9	-3'753	+20'281	64 3948	4'7	12	+27'928	+26'556	65 3755	9'6		
22	-59'068	+24'103			17	-34'768	+61'093			12	-3'153	+33'229			16	+27'904	+25'733				
10	-58'119	+25'050			9	-34'660	+40'710			9	-2'949	+64'103			22	+29'130	+55'648				
10	-57'454	+37'029			9	-34'339	+54'050			78	-2'395	+62'761			14	+29'322	+7'267				
14	-56'868	+50'479			9	-32'863	+36'741			13	-1'631	+10'168			9	+29'557	+1'234				
11			65 3742	9'3	10	61	-32'251	+5'625	65 3748	9'6	20	121	-1'277	+63'293	64 3950	8'8	13	181	+30'640	+24'742	
II	-56'711	+11'786			12	-31'752	+36'061	10			-1'258	+48'199	12	+30'808			+17'249				
12	-56'680	+2'677			14	-31'653	+11'708	13			-0'833	+2'726	12	+31'320			+5'315				
II	-56'390	+32'265			9	-31'166	+5'793	9			+2'009	+27'081	9	+31'576			+19'088				
12	-56'259	+48'423			10	-31'034	+35'887			10	+2'295	+51'399			11	+31'585	+54'606				
9	-56'098	+11'272	65 3743	8'8	10	-31'025	+58'075	65 3748	9'6	9	+2'469	+5'892	65 3752	8'3	10	+32'397	+47'650	65 3757	9'1		
22	-55'704	+8'469			II	-30'369	+22'868			10	+4'383	+23'150			17	+32'634	+59'822				
10	-53'871	+53'973			15	-29'465	+39'801			9	+4'534	+34'411			20	+32'651	+45'729				
9	-53'772	+8'499			10	-28'573	+57'793			9	+5'609	+38'602			20	+33'886	+5'377				
14	-53'277	+52'903			II	-28'119	+29'717			11	+5'830	+31'978			11	+34'109	+2'846	65 3759	9'6		
21			65 3744	9'1	9	71	-26'583	+33'901	65 3749	9'6	36	131	+6'223	+39'404	65 3752	8'3	10	191	+35'186	+35'215	
II	-51'715	+57'489			9	-25'540	+58'147	10			+6'765	+23'722	9	+35'446			+58'580				
9	-51'662	+24'253			12	-25'441	+19'117	14			+7'226	+5'602	9	+35'456			+57'970				
II	-51'625	+17'641			12	-25'306	+23'284	12			+7'701	+42'227	10	+35'557			+31'754				
12	-50'866	+14'904			12	-24'154	+38'627			9	+7'959	+20'313			10	+37'250	+23'081				
II	-50'800	+13'920	65 3745	9'3	12	-23'670	+53'683	65 3748	9'6	10	+8'135	+17'782	65 3753	9'0	9	+37'471	+17'959	65 3760	8'6		
22	-50'217	+52'489			9	-23'493	+7'883			10	+8'263	+57'999			10	+37'899	+62'575				
12	-50'212	+48'906			13	-22'745	+2'093			9	+9'776	+1'026			9	+38'081	+30'584				
9	-49'308	+32'627			10	-22'649	+42'575			9	+9'920	+13'754			12	+40'228	+19'464				
14	-48'564	+33'789			10	-22'576	+29'122			9	+10'518	+46'313			13	+40'297	+9'397				
19	-48'251	+39'061	65 3746	8'1	81			65 3748	9'6	14	141	+10'572	+14'005	65 3754	5'9	9	201	+40'512	+14'958	65 3760	8'6
9	-47'804	+25'946			10	-22'140	+46'269			14	+11'334	+4'300	12			+41'226	+21'123				
9	-47'171	+16'903			11	-21'706	+47'237			16	+11'429	+36'585	11			+41'465	+35'185				
12	-47'161	+38'469			12	-20'523	+13'784			10	+12'767	+17'002	10			+41'603	+8'837				
12	-45'621	+38'937			9	-20'461	+40'120			9	+13'002	+28'645			19	+42'625	+54'382				
13	-45'165	+17'665			10	-19'801	+1'371			9	+13'203	+53'484			15	+43'001	+41'220				
17	-44'079	+29'813	65 3747	9'3	10	-19'367	+6'896	65 3748	9'6	10	+13'933	+40'161	65 3753	9'0	10	+43'423	+55'331	65 3760	8'6		
13	-43'343	+31'949			12	-18'682	+64'654			10	+14'366	+3'848			10	+43'509	+2'085				
II	-43'272	+18'843			13	-18'288	+18'498			9	+15'795	+21'983			12	+46'499	+18'341				
20	-42'923	+31'240			9	-14'807	+53'177			10	+15'838	+20'997			9	+47'949	+19'871				
38	-42'687	+63'426			9	-14'727	+41'940			151					9	+48'347	+15'093				
41			64 3936	8'5	91			65 3748	9'6	9	+16'816	+35'112	65 3754	5'9	34	211	+49'016	+59'192	65 3760	8'6	
9	-42'584	+21'763			10	-14'443	+46'819			13	+16'886	+44'001			10	+49'320	+0'790				
9	-41'390	+51'190			9	-14'286	+26'022			9	+17'096	+19'026			9	+49'751	+50'203				
10	-40'991	+28'016			9	-14'075	+20'832			9	+17'115	+32'011			12	+50'567	+4'070				
13	-40'526	+4'785			17	-13'923	+82'350			11	+17'218	+19'723			12	+50'567	+4'070				
9	-40'438	+43'144			10	-13'908	+36'813			20	+17'427	+47'754	65 3753	9'0	10	+50'843	+14'695				
II	-40'102	+19'143	65 3745	9'3	9	-13'690	+35'811	65 3749	9'6	9	+17'658	+39'898			65 3754	5'9	9	+51'772	+43'262		
II	-40'048	+32'483			10	-13'438	+1'621			12	+19'761	+41'085					9	+51'981	+6'150		
38	-38'637	+1'106			9	-13'092	+16'979			13	+19'828	+51'220					9	+52'595	+57'147		
12	-38'583	+29'893			13	-12'945	+3'710			9	+18'282	+19'432	10	+52'643			+63'859				
II	-38'080	+45'173			9	-12'892	+28'718			161					15	+53'297	+22'680				
			65 3746	8'1	101			65 3749	9'6	9	+19'005	+13'048	64 3959	9'3	9	+53'720	+16'445				
					9	-12'654	+62'582			12	+19'761	+41'085			12	+56'018	+12'322				
					15	-12'601	+3'021			13	+19'828	+51'220			12	+57'383	+23'093				
					15	-12'458	+19'470			20	+20'850	+63'703			13	+57'486	+22'520				
					12	-11'815	+53'087			12	+23'253	+54'169									
					9	-11'485	+54'894			9	+23'500	+7'703			9	+57'537	+41'723				
					9	-9'881	+53'325			10	+24'105	+2'166			11	+57'680	+61'520				
					9	-8'551	+10'599			12	+25'570	+6'073			11	+57'822	+55'208				
					10	-8'443	+29'218			10	+25'638	+34'126			13	+58'134	+8'798				
					9	-7'719	+64'360			14	+25'701	+7'551			9	+61'560	+13'020				
					9	-6'835	+3'872														

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231,					291,					351,					411,			
9	+62°678	+18°434			9	-18°141	-44°241			9	+13°378	-36°144			11	+49°042	-14°419		
12	+63°082	+64°344			12	-18°045	-1°453			9	+13°651	-40°344			13	+50°418	-18°517		
10	-64°462	-23°016			11	-17°657	-32°212			11	+13°682	-57°761			10	+50°520	-39°789		
10	-64°258	-3°446			11	-17°127	-27°447			20	+13°934	-8°061	66 3394	9°1	10	+50°806	-50°779		
9	-63°024	-27°549			11	-17°031	-56°278			13	+14°370	-38°341			12	+52°251	-21°898		
15	-63°018	-62°574	67 3577	9°3	10	-14°065	-62°320			11	+14°831	-57°392			14	+52°341	-58°728		
9	-60°422	-42°262			9	-13°696	-45°814			10	+15°897	-13°716			10	+52°403	-44°966		
11	-60°392	-43°294			10	-13°528	-28°157			9	+16°762	-0°723			9	+55°392	-27°286		
9	-59°618	-2°606			18	-13°460	-13°307	66 3388	9°4	10	+16°880	-4°329			9	+57°473	-6°373		
12	-58°942	-52°848			13	-12°601	-41°804			14	+16°940	-58°731			10	+59°062	-36°780		
	241					301					361					421			
44	-57°541	-59°689	66 3383	8°3	9	-12°465	-38°270			10	+19°250	-40°967			9	+59°189	-13°019		
10	-55°256	-59°800			13	-12°373	-11°270			10	+19°282	-25°026			10	+61°012	-19°663		
13	-53°902	-15°720			10	-11°601	-18°407			18	+19°525	-61°878	67 3595	9°4	11	+61°542	-4°112		
9	-53°854	-63°755			9	-11°190	-26°852			10	+20°260	-14°976			15	+61°937	-15°851		
11	-53°465	-35°719			9	-10°868	-50°366			19	+20°275	-35°395	66 3395	9°6	11	+62°320	-9°138		
10	-53°028	-1°541			14	-10°055	-8°231			9	+20°293	-39°123			10	+63°106	-8°267		
10	-49°911	-19°512			11	-9°607	-38°359			12	+20°694	-46°885			10	+63°124	-30°767		
11	-49°774	-18°656			11	-8°759	-50°683			13	+20°708	-47°012			11	+63°622	-5°792		
9	-49°349	-34°907			13	-8°546	-16°798			22	+21°493	-21°746	56 3396	8°8	11	+64°905	-31°939		
10	-46°577	-31°011			27	-7°944	-62°697	67 3590	8°8	10	+21°607	-55°378							
	251					311					371								
11	-46°511	-50°167			10	-7°543	-18°311			10	+21°976	-7°061							
9	-46°426	-35°986			12	-6°962	-24°293			9	+24°374	-23°972							
10	-45°999	-61°469			24	-6°688	-61°888	67 3591	9°1	13	+24°555	-3°092							
9	-45°496	-24°589			10	-5°850	-58°453			15	+24°641	-16°398							
13	-45°334	-9°839			10	-5°524	-8°120			10	+25°242	-18°882							
13	-44°781	-0°091			11	-4°380	-37°725			11	+25°833	-56°327							
14	-44°394	-51°758			12	-4°273	-58°573			9	+26°705	-9°817							
13	-43°034	-26°185			10	-3°751	-3°305			30	+28°594	-54°116	66 3397	8°6					
12	-41°807	-24°611			9	-3°349	-54°475			12	+29°051	-43°844							
11	-40°693	-59°107			19	-2°725	-13°888	66 3389	9°6	10	+30°557	-8°843							
	261					321					381								
9	-39°010	-33°843			12	-2°610	-40°997			9	+31°088	-61°544							
9	-38°824	-0°478			24	-2°424	-6°395	66 3390	8°8	9	+32°846	-57°694							
12	-35°572	-6°540			12	-1°220	-50°002			11	+33°163	-7°732							
10	-35°152	-17°264			11	-0°137	-26°214			10	+34°461	-0°361							
9	-33°819	-52°041			10	+0°347	-9°503			14	+34°819	-13°496							
10	-32°860	-29°286			12	+0°351	-12°352			12	+36°246	-20°647							
15	-31°266	-19°233			12	+0°358	-4°546			15	+37°317	-57°872	66 3398	9°6					
10	-31°094	-59°817			12	+1°158	-13°884			9	+38°552	-25°102							
9	-30°574	-35°627			12	+1°261	-22°069			9	+38°632	-1°281							
11	-30°427	-64°641			15	+1°612	-32°489			9	+39°709	-9°131							
	271					331					391								
10	-30°408	-44°147			21	+1°773	-45°578	66 3391	9°3	12	+40°578	-12°607							
9	-30°148	-38°948			9	+1°777	-43°704			10	+40°781	-16°242							
9	-29°469	-5°676			11	+1°816	-19°430			12	+41°203	-56°560							
13	-28°460	-50°403			11	+2°323	-17°321			12	+41°254	-43°568							
11	-26°882	-48°877			17	+2°524	-49°488			11	+42°123	-36°935							
14	-25°914	-17°865			11	+2°852	-60°002			10	+43°059	-22°549							
10	-25°813	-21°943			11	+4°487	-29°334			9	+43°200	-48°276							
9	-24°113	-1°108			16	+4°712	-50°810			9	+43°312	-29°351							
11	-23°966	-52°515			13	+4°898	-35°123			13	+43°324	-46°706							
11	-23°368	-27°815			20	+5°547	-48°653	66 3392	9°6	13	+43°662	-37°101							
	281					341					401								
11	-22°540	-27°958			9	+5°605	-49°357			9	+44°688	-40°944							
12	-22°538	-44°192			15	+6°234	-14°045			11	+45°276	-37°485							
15	-22°489	-8°122			10	+6°297	-26°689			10	+46°731	-63°283							
9	-21°139	-37°741			10	+6°383	-40°043			18	+46°988	-38°871	66 3399	9°6					
17	-19°790	-38°865	66 3384	9°6	25	+9°708	-12°082	66 3393	8°8	20	+48°260	-48°818	66 3400	9°3					
12	-19°585	-47°765			10	+9°932	-30°065			12	+48°466	-34°870							
11	-19°102	-5°536			10	+10°172	-56°764			14	+48°479	-0°779							
16	-18°780	-17°339	66 3387	9°6	9	+10°359	-48°943			14	+48°492	-32°632							
20	-18°778	-23°836	66 3386	9°1	12	+11°119	-1°073			13	+48°593	-1°269							
32	-18°745	-49°136	66 3385	8°5	14	+13°293	-22°197			9	+48°850	-22°487							

RECTANGULAR CO-ORDINATES.

18^h 54^m, - 66°

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 18 ^h 54 ^m , - 66°. Plate 1374. 1895, Aug. 15. PROVISIONAL CONSTANTS. a = - '01131 d = - '00031 b = - '00016 e = - '01121 c = + '0131 f = - '0384 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$																			
10	-64'610	+19'241			10	-61'892	+0'310			10	-61'364	+14'292			10	-60'877	+3'669		
9	-63'862	+14'509			9	-58'622	+16'238			9	-57'839	+61'472			9	-57'837	+15'822		
10	-63'026	+63'444			12	-57'839	+61'472			12	-57'839	+61'472			9	-57'837	+15'822		
11	-62'603	+56'741			9	-57'461	+15'585			9	-57'461	+15'585			9	-57'461	+15'585		
9	-62'443	+42'840			13	-57'255	+55'176			13	-57'255	+55'176			9	-57'255	+55'176		
10	-56'570	+41'708			10	-56'570	+41'708			10	-56'570	+41'708			10	-56'570	+41'708		
9	-56'128	+31'285			9	-56'128	+31'285			9	-56'128	+31'285			9	-56'128	+31'285		
15	-56'041	+12'285			15	-56'041	+12'285			15	-56'041	+12'285			15	-56'041	+12'285		
14	-55'410	+23'145			14	-55'410	+23'145			14	-55'410	+23'145			14	-55'410	+23'145		
9	-55'402	+47'816			9	-55'402	+47'816			9	-55'402	+47'816			9	-55'402	+47'816		
15	-55'302	+22'570			15	-55'302	+22'570			15	-55'302	+22'570			15	-55'302	+22'570		
15	-53'689	+8'950			15	-53'689	+8'950			15	-53'689	+8'950			15	-53'689	+8'950		
9	-53'203	+40'378			9	-53'203	+40'378			9	-53'203	+40'378			9	-53'203	+40'378		
9	-52'842	+45'390			9	-52'842	+45'390			9	-52'842	+45'390			9	-52'842	+45'390		
15	-52'661	+64'661			15	-52'661	+64'661			15	-52'661	+64'661			15	-52'661	+64'661		
9	-52'002	+7'681			9	-52'002	+7'681			9	-52'002	+7'681			9	-52'002	+7'681		
9	-51'954	+22'556			9	-51'954	+22'556			9	-51'954	+22'556			9	-51'954	+22'556		
9	-51'558	+1'536			9	-51'558	+1'536			9	-51'558	+1'536			9	-51'558	+1'536		
9	-50'858	+43'894			9	-50'858	+43'894			9	-50'858	+43'894			9	-50'858	+43'894		
9	-50'553	+13'374			9	-50'553	+13'374			9	-50'553	+13'374			9	-50'553	+13'374		
10	-49'806	+18'649			10	-49'806	+18'649			10	-49'806	+18'649			10	-49'806	+18'649		
9	-48'539	+39'123			9	-48'539	+39'123			9	-48'539	+39'123			9	-48'539	+39'123		
9	-47'722	+46'064			9	-47'722	+46'064			9	-47'722	+46'064			9	-47'722	+46'064		
11	-47'688	+46'142			11	-47'688	+46'142			11	-47'688	+46'142			11	-47'688	+46'142		
11	-46'862	+40'024			11	-46'862	+40'024			11	-46'862	+40'024			11	-46'862	+40'024		
9	-46'030	+30'353			9	-46'030	+30'353			9	-46'030	+30'353			9	-46'030	+30'353		
11	-45'844	+8'607			11	-45'844	+8'607			11	-45'844	+8'607			11	-45'844	+8'607		
9	-45'791	+0'888			9	-45'791	+0'888			9	-45'791	+0'888			9	-45'791	+0'888		
11	-45'626	+11'600			11	-45'626	+11'600			11	-45'626	+11'600			11	-45'626	+11'600		
9	-45'394	+23'476			9	-45'394	+23'476			9	-45'394	+23'476			9	-45'394	+23'476		
34	-45'268	+23'644			34	-45'268	+23'644			34	-45'268	+23'644			34	-45'268	+23'644		
10	-45'050	+22'024			10	-45'050	+22'024			10	-45'050	+22'024			10	-45'050	+22'024		
9	-44'756	+23'941			9	-44'756	+23'941			9	-44'756	+23'941			9	-44'756	+23'941		
9	-44'710	+52'510			9	-44'710	+52'510			9	-44'710	+52'510			9	-44'710	+52'510		
10	-44'466	+36'188			10	-44'466	+36'188			10	-44'466	+36'188			10	-44'466	+36'188		
9	-42'945	+59'665			9	-42'945	+59'665			9	-42'945	+59'665			9	-42'945	+59'665		
9	-41'846	+1'994			9	-41'846	+1'994			9	-41'846	+1'994			9	-41'846	+1'994		
10	-41'580	+21'767			10	-41'580	+21'767			10	-41'580	+21'767			10	-41'580	+21'767		
14	-41'028	+49'721			14	-41'028	+49'721			14	-41'028	+49'721			14	-41'028	+49'721		
10	-40'046	+4'714			10	-40'046	+4'714			10	-40'046	+4'714			10	-40'046	+4'714		
9	-36'852	+38'353			9	-36'852	+38'353			9	-36'852	+38'353			9	-36'852	+38'353		
10	-36'404	+11'058			10	-36'404	+11'058			10	-36'404	+11'058			10	-36'404	+11'058		
9	-36'233	+39'537			9	-36'233	+39'537			9	-36'233	+39'537			9	-36'233	+39'537		
9	-36'233	+38'086			9	-36'233	+38'086			9	-36'233	+38'086			9	-36'233	+38'086		
9	-36'052	+29'256			9	-36'052	+29'256			9	-36'052	+29'256			9	-36'052	+29'256		
61					61					61					61				
9	-35'521	+50'766			9	-35'521	+50'766			9	-35'521	+50'766			9	-35'521	+50'766		
16	-35'350	+50'565			16	-35'350	+50'565			16	-35'350	+50'565			16	-35'350	+50'565		
9	-34'511	+47'014			9	-34'511	+47'014			9	-34'511	+47'014			9	-34'511	+47'014		
9	-33'862	+43'760			9	-33'862	+43'760			9	-33'862	+43'760			9	-33'862	+43'760		
9	-32'866	+40'744			9	-32'866	+40'744			9	-32'866	+40'744			9	-32'866	+40'744		
17	-32'471	+47'739			17	-32'471	+47'739			17	-32'471	+47'739			17	-32'471	+47'739		
9	-32'180	+49'420			9	-32'180	+49'420			9	-32'180	+49'420			9	-32'180	+49'420		
13	-31'607	+48'116			13	-31'607	+48'116			13	-31'607	+48'116			13	-31'607	+48'116		
9	-31'482	+40'340			9	-31'482	+40'340			9	-31'482	+40'340			9	-31'482	+40'340		
10	-30'914	+22'787			10	-30'914	+22'787			10	-30'914	+22'787			10	-30'914	+22'787		
71					71					71					71				
9	-29'739	+43'376			9	-29'739	+43'376			9	-29'739	+43'376			9	-29'739	+43'376		
9	-29'535	+24'444			9	-29'535	+24'444			9	-29'535	+24'444			9	-29'535	+24'444		
9	-27'750	+21'188			9	-27'750	+21'188			9	-27'750	+21'188			9	-27'750	+21'188		
10	-27'430	+49'820			10	-27'430	+49'820			10	-27'430	+49'820			10	-27'430	+49'820		
10	-27'230	+50'145			10	-27'230	+50'145			10	-27'230	+50'145			10	-27'230	+50'145		
10	-25'388	+59'955			10	-25'388	+59'955			10	-25'388	+59'955			10	-25'388	+59'955		
9	-25'304	+32'939			9	-25'304	+32'939			9	-25'304	+32'939			9	-25'304	+32'939		
9	-24'822	+22'268			9	-24'822	+22'268			9	-24'822	+22'268			9	-24'822	+22'268		
18	-24'224	+60'180			18	-24'224	+60'180			18	-24'224	+60'180			18	-24'224	+60'180		
17	-23'279	+23'122			17	-23'279	+23'122			17	-23'279	+23'122			17	-23'279	+23'122		
81					81					81					81				
10	-23'048	+46'715			10	-23'048	+46'715			10	-23'048	+46'715			10	-23'048	+46'715		
9	-21'469	+31'492			9	-21'469	+31'492			9	-21'469	+31'492			9	-21'469	+31'492		
9	-21'290	+12'443			9	-21'290	+12'443			9	-21'290	+12'443			9	-21'290	+12'443		
18	-20'846	+23'524			18	-20'846	+23'524			18	-20'846	+23'524			18	-20'846	+23'524		
17	-18'522	+24'878			17	-18'522	+24'878			17	-18'522	+24'878			17	-18'522	+24'878		
9	-18'511	+14'197			9	-18'511	+14'197			9	-18'511	+14'197			9	-18'511	+14'197		
10	-18'146	+42'543			10	-18'146	+42'543			10	-18'146	+42'543			10	-18'146	+42'543		
9	-17'729	+60'992			9	-17'729	+60'992			9	-17'729	+60'992			9	-17'729	+60'992		
10	-16'883	+33'327			10	-16'883	+33'327			10	-16'883	+33'327			10	-16'883	+33'327		
17	-16'618	+49'822			17	-16'618	+49'822			17	-16'618	+49'822			17	-16'618	+49'822		
91					91					91					91				
9	-16'505	+9'001			9	-16'505	+9'001			9	-16'505	+9'001			9	-16'505	+9'001		
9	-16'394	+56'060			9	-16'394	+56'060			9	-16'394	+56'060			9	-16'394	+56'060		
9	-16'221	+56'504			9	-16'221	+56'504			9	-16'221	+56'504			9	-16'221	+56'504		

18° 54' - 66°

RECTANGULAR CO-ORDINATES.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231					291					351					411			
16	+42'207	+55'138			11	-64'532	-47'472			11	-37'676	-0'587			13	-9'425	-9'314		
16	+42'357	+44'290			9	-63'752	-3'358			12	-37'462	-24'055			12	-9'148	-6'574		
9	+43'127	+63'087			9	-63'566	-41'619			9	-37'128	-47'159			10	-8'961	-21'574		
21	+43'418	+40'610			12	-63'220	-38'154			9	-36'252	-24'469			17	-8'660	-64'189		
9	+43'671	+40'321	65 3773	8'9	15	-62'637	-1'310			9	-35'821	-26'320			9	-8'256	-5'314		
9	+43'819	+23'591			13	-62'477	-1'789			11	-35'256	-63'799			10	-7'067	-2'486		
9	+44'371	+22'441			12	-62'228	-35'458			26	-35'173	-2'422	66 3402	8'5	11	-5'401	-35'427		
9	+44'398	+42'580			17	-61'421	-39'419	66 3399	9'6	9	-34'082	-32'357			9	-3'742	-5'878		
12	+45'028	+10'882			11	-61'112	-14'870			10	-33'972	-57'023			11	-2'954	-2'504		
38	+45'276	+51'128	65 3774	7'9	9	-60'728	-22'925			12	-33'942	-39'609			16	-2'845	-23'857		
	241					301					361					421			
15	+45'828	+64'296			15	-60'373	-33'077			11	-33'665	-61'487			9	-2'209	-11'058		
9	+46'018	+62'691			18	-59'480	-49'248	66 3400	9'3	16	-33'642	-57'821			13	-1'893	-25'568		
10	+46'486	+18'812			15	-59'442	-18'870			13	-33'472	-21'571			9	-1'576	-58'973		
11	+46'988	+56'494			11	-57'849	-40'080			9	-32'781	-15'643			9	-1'376	-13'618		
9	+47'664	+24'013			18	-57'375	-22'109			16	-31'813	-17'979			19	-0'888	-1'684	66 3408	9'3
9	+47'938	+54'574			10	-56'782	-51'030			11	-30'969	-13'435			9	-0'660	-35'205		
18	+47'962	+8'000	65 3775	9'5	10	-56'533	-25'226			12	-29'843	-36'739			10	-0'288	-36'587		
18	+48'250	+5'131	65 3777	9'5	11	-55'602	-45'109			13	-29'522	-38'155			14	-0'231	-50'660		
9	+48'754	+33'457			9	-54'857	-57'346			9	-29'311	-31'773			16	+0'076	-0'197	66 3409	9'6
10	+48'905	+38'686			9	-54'841	-29'318			9	-28'290	-61'354			13	+0'220	-31'277		
	251					311					371					431			
11	+49'226	+14'558			17	-54'675	-58'856			18	-27'767	-29'848	66 3403	9'4	22	+0'325	-25'909	66 3410	9'1
20	+49'424	+62'307			9	-54'579	-34'416			9	-27'583	-11'810			11	+1'280	-51'411		
12	+50'428	+51'756			12	-53'867	-22'264			9	-27'478	-17'257			19	+1'500	-49'069		
9	+50'936	+44'224			9	-53'261	-6'261			13	-27'277	-17'437			9	+1'886	-36'043		
9	+51'152	+15'413			9	-52'131	-39'476			9	-26'490	-44'125			11	+1'911	-52'511		
9	+51'932	+45'086			10	-51'933	-11'569			10	-26'171	-59'493			16	+2'089	-52'385		
11	+53'230	+39'781			11	-51'087	-12'764			10	-25'121	-16'853			9	+2'831	-22'699		
12	+53'726	+37'856			9	-50'641	-38'277			10	-24'905	-25'2'9			9	+2'965	-5'227		
9	+53'953	+13'462			10	-49'797	-57'677			11	-24'574	-44'798			11	+4'280	-56'415		
9	+54'021	+0'803			9	-49'554	-10'136			48	-24'510	-47'774	66 3404	7'2	12	+5'033	-32'661		
	261					321					381					441			
9	+54'245	+49'871			14	-49'546	-36'466			9	-24'461	-31'359			9	+5'076	-15'433		
9	+54'508	+17'744			9	-49'495	-52'884			9	-23'689	-46'246			9	+5'918	-28'214		
9	+54'782	+45'687			13	-49'363	-3'715			17	-23'210	-52'521			12	+7'158	-14'080		
10	+55'484	+8'881			9	-49'361	-52'462			13	-22'854	-62'016			12	+7'354	-43'042		
9	+56'455	+24'430			11	-48'799	-19'262			12	-22'229	-4'296			11	+7'703	-18'773		
9	+56'874	+50'446			10	-48'742	-58'171			12	-22'132	-1'294			12	+7'856	-36'133		
9	+57'738	+33'086			9	-48'718	-1'214			13	-21'663	-39'251			9	+8'124	-0'820		
24	+58'125	+40'587	65 3778	8'4	12	-48'232	-8'673			9	-21'256	-36'338			17	+8'350	-18'196		
9	+58'456	+26'213			18	-48'149	-15'386			9	-20'318	-11'418			9	+8'415	-25'795		
11	+58'931	+60'830			11	-47'514	-7'739			9	-20'223	-9'488			9	+8'672	-12'635		
	271					331					391					451			
17	+59'195	+35'594	65 3779	9'5	9	-47'424	-59'711			14	-19'108	-37'663			9	+8'783	-27'525		
9	+59'970	+47'377			12	-47'116	-5'237			9	-19'085	-59'064			10	+9'138	-57'017		
16	+60'103	+41'417			9	-46'955	-48'601			24	-18'915	-32'719	66 3405	1'6	11	+10'812	-12'626		
9	+60'111	+62'772			12	-45'918	-30'173			12	-18'710	-5'600			10	+11'025	-22'339		
24	+60'577	+33'676	65 3780	8'7	9	-45'789	-20'629			12	-18'359	-43'716			11	+11'177	-44'229		
9	+61'011	+6'489			9	-45'537	-60'917			21	-18'175	-19'263	66 3406	8'5	13	+12'526	-39'853		
9	+61'758	+1'309			10	-45'469	-62'365			12	-17'274	-35'673			9	+13'100	-17'998		
9	+62'224	+50'240			9	-44'862	-59'006			12	-16'264	-57'818			11	+13'412	-17'318		
9	+62'241	+12'009			11	-44'795	-31'901			13	-14'667	-9'988			17	+13'527	-48'865		
9	+62'326	+25'625			11	-44'182	-15'150			16	-14'620	-31'307			13	+13'566	-21'815		
	281					341					401					461			
10	+62'730	+8'944			9	-44'118	-10'818			10	-14'195	-35'875			11	+15'129	-46'741		
11	+62'750	+4'627			16	-44'044	-31'220			19	-13'517	-28'007	66 3407	9'6	12	+15'442	-30'394		
9	+62'891	+42'592			11	-43'302	-10'285			10	-13'135	-4'636			10	+16'858	-25'662		
18	+63'699	+26'392			9	-41'448	-31'758			9	-11'768	-63'028			11	+17'063	-33'185		
9	+64'258	+2'943			35	-41'390	-28'220	66 3401	7'8	12	-11'247	-55'066			14	+17'238	-27'600		
17	+64'402	+51'284			16	-40'612	-57'034			9	-11'097	-18'455			20	+17'691	-59'265	67 3612	8'6
9	+64'545	+47'763			9	-40'458	-44'247			12	-10'815	-11'977			9	+18'478	-25'240		
9	+64'785	+6'612			13	-40'247	-38'824			9	-10'615	-19'958			10	+19'518	-33'806		
12	-64'868	-37'874			9	-39'024	-14'738			15	-10'546	-35'443			11	+19'800	-28'370		
9	-64'549	-49'058			14	-37'984	-5'259			10	-9'476	-3'791			11	+19'859	-37'978		

19^h 12^m, - 66°

[illegible]

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
	111					171					231					PLATE CENTRE.			
9	+38.809	+54.315			11	-18.427	-47.710			10	+54.371	-4.539				19h 30m, - 66°.			
9	+38.949	+15.587			12	-16.135	-11.216			10	+55.188	-62.788	67 3649	9.5		Plate 411. 1892, Aug. 19.			
9	+42.212	+31.525			16	-14.203	-26.662	66 3419	9.5	21	+57.005	-46.954	66 3437	8.4		PROVISIONAL CONSTANTS.			
9	+42.458	+1.690			9	-13.940	-1.666			11	+59.300	-4.404				a = - .01138 d = - .00053			
19	+43.687	+6.051	65 3800	8.7	11	-12.206	-1.427			10	+61.530	-63.919				b = + .00024 e = - .01141			
9	+43.824	+35.085			15	-7.299	-4.348	66 3420	9.2							c = - .0582 f = - .1226			
9	+44.074	+47.084			18	-4.246	-28.488	66 3421	9.1							To obtain standard co-ordinates, ξ, η			
9	+44.215	+52.478			9	-4.116	-51.323									$\xi = x + ax + by + c$			
9	+45.107	+6.110			21	-2.533	-54.881	66 3422	8.7							$\eta = y + dx + ey + f$			
14	+49.322	+56.765	65 3801	9.2	10	-1.800	-4.265												
	121					181													
16	+50.843	+54.858	65 3802	8.7	11	-0.979	-64.447	67 3636	9.5										
9	+52.271	+32.024			11	-0.758	-22.460												
9	+53.513	+22.438			16	-0.460	-30.019	66 3423	9.5										
9	+55.785	+11.784			10	-0.117	-50.387												
9	+56.267	+28.178			10	+1.574	-47.222												
9	+57.318	+50.186			20	+2.816	-6.964	66 3424	8.9										
9	+57.708	+14.744			21	+3.826	-21.269	66 3425	8.7										
9	+59.760	+60.970			11	+4.273	-9.576												
9	+61.081	+34.623			23	+5.480	-46.572	66 3426	8.5										
9	+61.201	+2.329			22	+5.639	-19.717	66 3427	8.9										
	131					191													
11	+63.893	+40.120			13	+7.384	-57.530	66 3428	9.5										
10	+64.757	+25.920	65 3803	9.5	11	+7.460	-5.006												
48	-64.757	-3.443	66 3413	7.2	19	+7.826	-38.044	66 3429	9.1										
10	-63.493	-13.213			17	+9.122	-32.986	66 3430	9.5										
9	-59.818	-31.171			13	+9.864	-53.779												
9	-59.180	-46.334			10	+10.827	-58.768												
9	-56.805	-48.524			9	+14.451	-3.138												
9	-56.373	-56.097			12	+16.613	-3.396												
11	-55.712	-16.200			10	+16.973	-25.147												
9	-51.751	-31.779			12	+18.854	-21.069												
	141					201													
9	-49.042	-13.501			12	+19.333	-32.239												
15	-48.862	-35.538	66 3414	9.5	20	+19.649	-40.471	66 3431	8.5										
17	-48.729	-22.330	66 3415	9.5	12	+19.773	-12.732												
10	-47.727	-25.497			10	+20.687	-63.162												
11	-47.669	-25.619			12	+21.043	-20.205												
12	-45.725	-28.908			11	+22.602	-18.490												
9	-45.683	-47.356			15	+24.475	-56.827	66 3432	9.2										
9	-38.524	-23.104			11	+26.331	-6.999												
9	-36.578	-29.105			10	+27.219	-54.141												
9	-35.883	-0.736			9	+27.269	-53.995												
	151					211													
11	-34.303	-58.799			9	+27.454	-26.941												
9	-33.940	-25.949			9	+28.866	-63.011												
9	-32.984	-17.848			11	+29.718	-50.413												
10	-32.799	-39.428			16	+31.033	-16.445												
10	-32.678	-2.460			10	+31.433	-48.772												
12	-32.044	-17.900			17	+32.702	-11.696	66 3433	9.5										
10	-31.885	-15.340			10	+32.901	-20.742												
14	-31.825	-56.013	66 3416	9.5	16	+33.588	-43.864	66 3435	9.5										
56	-29.028	-50.757	66 3417	6.0	9	+33.693	-1.460												
12	-27.978	-14.799			25	+33.901	-19.529	66 3434	8.1										
	161					221													
11	-26.963	-63.808	67 3628	9.5	11	+34.747	-23.953												
18	-25.924	-9.543	66 3418	9.1	14	+39.580	-44.289												
9	-25.791	-57.165			17	+41.076	-21.327												
9	-24.710	-59.217			9	+41.139	-22.815												
14	-23.138	-37.198			9	+41.374	-44.340												
9	-22.752	-57.915			9	+41.380	-47.477												
10	-22.219	-29.815			12	+42.799	-18.311												
17	-20.642	-43.827			17	+45.137	-51.161	66 3436	8.9										
10	-19.909	-51.483			11	+48.316	-28.060												
10	-19.329	-31.333			10	+51.580	-50.004												

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
	111					171					231					PLATE CENTRE.			
9	+38.809	+54.315			11	-18.427	-47.710			10	+54.371	-4.539				19h 30m, - 66°.			
9	+38.949	+15.587			12	-16.135	-11.216			10	+55.188	-62.788	67 3649	9.5		Plate 411. 1892, Aug. 19.			
9	+42.212	+31.525			16	-14.203	-26.662	66 3419	9.5	21	+57.005	-46.954	66 3437	8.4		PROVISIONAL CONSTANTS.			
9	+42.458	+1.690			9	-13.940	-1.666			11	+59.300	-4.404				a = - .01138 d = - .00053			
19	+43.687	+6.051	65 3800	8.7	11	-12.206	-1.427			10	+61.530	-63.919				b = + .00024 e = - .01141			
9	+43.824	+35.085			15	-7.299	-4.348	66 3420	9.2							c = - .0582 f = - .1226			
9	+44.074	+47.084			18	-4.246	-28.488	66 3421	9.1							To obtain standard co-ordinates, ξ, η			
9	+44.215	+52.478			9	-4.116	-51.323									$\xi = x + ax + by + c$			
9	+45.107	+6.110			21	-2.533	-54.881	66 3422	8.7							$\eta = y + dx + ey + f$			
14	+49.322	+56.765	65 3801	9.2	10	-1.800	-4.265												
	121					181													
16	+50.843	+54.858	65 3802	8.7	11	-0.979	-64.447	67 3636	9.5										
9	+52.271	+32.024			11	-0.758	-22.460												
9	+53.513	+22.438			16	-0.460	-30.019	66 3423	9.5										
9	+55.785	+11.784			10	-0.117	-50.387												
9	+56.267	+28.178			10	+1.574	-47.222												
9	+57.318	+50.186			20	+2.816	-6.964	66 3424	8.9										
9	+57.708	+14.744			21	+3.826	-21.269	66 3425	8.7										
9	+59.760	+60.970			11	+4.273	-9.576												
9	+61.081	+34.623			23	+5.480	-46.572	66 3426	8.5										
9	+61.201	+2.329			22	+5.639	-19.717	66 3427	8.9										
	131					191													
11	+63.893	+40.120			13	+7.384	-57.530	66 3428	9.5										
10	+64.757	+25.920	65 3803	9.5	11	+7.460	-5.006												
48	-64.757	-3.443	66 3413	7.2	19	+7.826	-38.044	66 3429	9.1										
10	-63.493	-13.213			17	+9.122	-32.986	66 3430	9.5										
9	-59.818	-31.171			13	+9.864	-53.779												
9	-59.180	-46.334			10	+10.827	-58.768												
9	-56.805	-48.524			9	+14.451	-3.138												
9	-56.373	-56.097			12	+16.613	-3.396												
11	-55.712	-16.200			10	+16.973	-25.147												

RECTANGULAR CO-ORDINATES.

19^h 48^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.						
			No.	Mag.				No.	Mag.				No.	Mag.	No.	Mag.			
	51,					111,				PLATE CENTRE. 19 ^h 48 ^m , - 66°. Plate 1395. 1895, Sept. 13. PROVISIONAL CONSTANTS. a = - '01146 d = + '00042 b = - '00018 e = - '01106 c = - '0194 f = - '0008 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f									
9	+28.131	+47.414			13	+16.489	- 3.476	66 3448	9.5										
9	+30.203	+44.128			12	+17.491	-34.405			9	-40.538	+ 7.983							
10	+30.227	+43.167			10	+22.684	-33.055			9	-40.533	+25.970							
15	+32.243	+29.507			13	+24.127	-32.962	66 3449	9.2	9	-40.413	+19.281							
12	+34.348	+17.755	65 3818	8.9	14	+25.485	-31.685			9	-40.382	+47.786							
11	+34.893	+45.749			28	+25.764	-31.915	66 3450	7.9	10	-40.332	+17.007							
13	+35.612	+42.832			12	+29.441	- 4.080			17	-39.276	+48.698	65 3828	9.5					
13	+35.653	+47.295			17	+30.815	- 0.603	66 3451	9.2	9	-37.831	+58.819							
19	+38.424	+44.342	65 3819	8.9	10	+31.945	-57.382			13	-37.678	+46.838							
15	+39.133	+17.951	65 3820	9.5	11	+32.058	-33.088			14	-37.480	+49.753							
	61					121				15	-37.227	+25.573	65 3829	9.9					
9	+42.472	+25.393			11	+35.376	-18.005				61								
24	+47.445	+28.830	65 3821	8.5	12	+35.396	-17.577			17	-36.883	+22.132							
17	+48.981	+10.387	65 3822	9.5	12	+35.396	-17.577			13	-35.582	+37.287							
9	+52.649	+29.248			11	+36.886	- 3.214			9	-34.654	+39.589							
15	+55.084	+52.412			14	+38.403	-35.635			9	-34.527	+58.561							
					14	+38.776	-64.059			10	-34.481	+ 0.092							
16	+55.863	+42.845			16	+39.104	-59.172	67 3676	9.5	10	-33.464	+ 8.427							
30	+62.485	+ 5.453	65 3823	8.4	21	+39.580	-24.721	66 3452	8.7	9	-33.181	+62.643							
15	+63.696	+38.921			13	+40.329	- 7.630	66 3453	9.5	15	-33.181	+62.643							
20	-62.201	-51.825	66 3436	8.9	9	+42.581	-21.777			10	-32.971	+25.208							
13	-55.846	-50.180			11	+42.597	-28.578			9	-32.482	+39.406							
	71					131				16	-31.889	+32.673							
11	-51.412	- 4.168			17	+42.797	-52.163			10	-31.411	+48.218							
17	-51.331	-62.686	67 3649	9.5	9	+43.719	-53.029			9	-30.536	+39.870							
25	-50.647	-46.769	66 3437	8.4	14	+45.470	-24.852			9	-30.259	+58.531							
12	-45.754	-30.440			16	+58.956	- 5.126	66 3454	8.9	20	-29.943	+ 2.021	66 3461	9.0					
19	-44.965	-63.365			14	+59.876	- 0.081			10	-28.847	+15.421							
					21	+60.237	-14.615	66 3455	8.5	9	-27.769	+50.951							
12	-43.160	-11.859			10	+62.294	-21.773			11	-27.268	+39.357							
11	-42.677	-32.833			52	+62.608	-51.343	66 3456	7.9	9	-27.107	+39.195							
12	-39.540	-18.894								9	-26.533	+42.587							
13	-37.536	- 6.646								9	-26.350	+32.074							
12	-37.413	-43.730									81								
	81									16	-26.068	+ 7.099							
12	-34.791	-56.126								9	-25.266	+25.178							
9	-27.022	-40.858								18	-25.266	+25.178							
15	-23.116	-38.338	66 3438	9.5						9	-25.246	+29.837							
15	-23.102	-37.886	66 3439	9.5						9	-25.230	+21.610							
10	-22.680	-42.591								31	-24.799	+56.171							
										9	-24.668	+24.903							
9	-21.360	-42.823								9	-24.186	+ 9.898							
11	-20.851	-13.440								9	-23.973	+44.888							
13	-17.977	- 1.057	66 3440	9.5						32	-23.942	+35.645							
12	-17.677	-21.666								9	-23.802	+60.279							
13	-16.503	- 5.634									91								
	91									9	-23.796	+61.522							
11	-14.004	-35.844								9	-23.094	+36.263							
13	-10.975	-55.061								9	-22.372	+61.438							
12	-10.946	-44.078								9	-21.531	+10.862							
12	- 9.757	-36.234								13	-19.583	+27.410	65 3830	9.0					
48	- 7.515	- 8.134	66 3442	7.3						19	-19.499	+59.464							
											-16.070	+26.884							
15	- 5.534	-47.006	66 3443	8.9						9	-15.229	+27.376							
14	- 4.902	-29.302								19	-14.354	+39.669	65 3831	8.9					
20	- 2.978	-16.796	66 3444	8.8						10	-14.339	+51.155							
42	- 0.052	-55.029	66 3445	6.7							101								
11	+ 2.082	-28.463								10	-13.431	+14.042							
	101									9	-12.811	+48.465							
10	+ 5.839	-10.582								11	-12.197	+59.085							
10	+ 7.130	-26.321								13	-11.686	+11.190							
18	+ 8.050	-47.880	66 3446	8.8						10	- 9.769	+56.023							
10	+ 8.189	- 6.132								9	- 9.605	+42.565							
11	+10.786	-32.571								10	- 9.043	+10.090							
										16	- 8.756	+55.213							
35	+11.965	- 4.816	66 3447	7.8						60	- 8.560	+39.053							
12	+13.069	-42.428								10	- 6.129	+22.569	65 3832	9.2					
9	+13.072	-31.056								9	-42.405	+38.831							
13	+14.661	-22.750								10	-42.090	+ 0.929							
10	+15.082	-55.788								16	-41.514	+ 6.680	65 3826	9.5					
										60	-40.638	+ 8.610	65 3827	6.9					
										10	-40.606	+ 5.713							

19h 48m, - 66°

RECTANGULAR CO-ORDINATES.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231					291			
9	- 5'835	+42'978			9	+33'031	+10'824			9	-63'639	-37'455			9	-26'893	-35'241		
9	- 5'495	+11'092			9	+33'046	+26'409			9	-63'554	-59'924			9	-26'123	-51'550		
9	- 5'184	+58'922			9	+33'053	+10'706			9	-63'023	-35'948			10	-25'841	-39'595		
9	- 5'111	+61'877			11	+33'103	+30'242			9	-62'898	-58'923			9	-25'342	-41'502		
16	- 4'967	+59'805			9	+35'439	+14'340			9	-62'104	-20'603			9	-24'479	-26'424		
31	- 4'817	+ 12'504	65 3833	8'9	9	+35'890	+18'459			9	-60'602	-42'909			9	-23'442	-59'105		
9	- 3'209	+32'645			9	+37'063	+34'042			9	-59'983	-13'012			9	-23'294	-44'204		
10	- 3'090	+42'814			36	+ 37'499	+ 25'958	65 3837	7'9	9	-59'708	-38'346			9	-21'494	-9'266		
10	- 2'874	+21'343			9	+37'906	+20'650			9	-59'068	-64'151			9	-19'257	-43'765		
9	- 1'561	+61'447			9	+38'213	+34'526			9	-59'003	-35'748			13	-18'497	-53'702		
	121					181					241					301			
9	- 1'510	+61'909			13	+38'336	+ 4'758			9	-57'740	-63'933			9	-18'329	-27'024		
9	- 0'664	+42'404			10	+39'045	+10'635			9	-56'483	- 3'576			9	-16'699	-32'926		
9	- 0'554	+21'562			9	+39'166	+54'904			9	-56'403	- 9'726			9	-16'136	-36'029		
10	+ 0'186	+51'515			9	+39'217	+31'612			9	-53'747	- 8'509			9	-14'612	-55'378		
9	+ 0'617	+ 5'658			9	+39'712	+61'701			9	-53'325	- 6'661			9	-14'545	-57'400		
9	+ 2'127	+27'723			9	+39'798	+ 0'474			18	-51'877	- 5'003	66 3454	8'9	9	-13'961	-42'690		
9	+ 2'758	+30'561			12	+40'217	+55'028			9	-51'367	-53'857			9	-13'475	-29'485		
9	+ 3'166	+ 0'048			9	+40'866	+12'186			23	- 49'907	- 14'365	66 3455	8'5	10	-12'504	-45'898		
36	+ 5'086	+ 31'593	65 3834	8'2	9	+41'211	+ 8'365			9	-49'161	-32'809			10	-12'333	-61'608		
9	+ 5'249	+ 0'695			9	+41'780	+16'095			9	-48'330	-26'903			9	-12'156	- 9'359		
	131					191					251					311			
9	+ 5'397	+35'796			10	+41'844	+ 2'218			9	-48'069	-14'700			9	-12'045	-62'112		
9	+ 6'971	+62'035			9	+42'975	+11'820			11	-47'368	-21'351			16	- 11'812	- 49'630	66 3463	9'2
9	+ 8'361	+24'203			9	+44'507	+13'434			9	-46'593	-17'614			14	-11'664	-12'578		
9	+ 9'502	+22'116			15	+44'696	+ 9'630	65 3838	9'9	9	-46'012	-40'557			9	-11'149	-37'063		
11	+10'147	+58'794			10	+44'941	+39'407			9	-45'195	-32'139			9	-10'792	-14'338		
9	+10'551	+64'027			9	+46'354	+31'797			15	-44'998	- 2'468	66 3457	9'2	14	- 9'592	-20'447		
9	+10'781	+ 8'431			9	+46'649	+17'363			30	- 44'951	- 50'823	66 3456	7'9	9	- 9'028	-61'644		
9	+13'316	+13'394			34	+ 46'926	+ 21'515	65 3839	8'6	9	-44'169	-51'155			9	- 8'298	- 3'396		
9	+13'610	+54'522			9	+47'202	+44'092			15	-44'016	-15'310	66 3458	9'2	9	- 7'065	-45'877		
9	+13'949	+24'220			9	+47'315	+44'956			9	-43'511	- 4'207			9	- 5'922	-45'107		
	141					201					261					321			
10	+14'912	+33'392			9	+47'673	+56'055			10	-43'048	-37'524			9	- 5'880	-23'665		
16	+15'262	+43'803	65 3835	9'6	15	+48'172	+12'853			9	-42'426	- 4'577			9	- 4'957	-18'403		
11	+16'555	+34'085			9	+49'452	+ 0'615			9	-41'207	-43'498			9	- 4'730	- 3'793		
11	+17'055	+ 1'199			14	+50'031	+29'944			9	-40'495	-51'855			9	- 4'282	-36'360		
10	+18'012	+56'734			10	+51'174	+44'526			10	-39'697	-40'029			13	- 2'441	-17'849		
9	+18'818	+57'032			9	+52'506	+43'634			9	-39'664	-38'894			9	- 1'800	-63'292		
10	+20'097	+58'785			9	+52'554	+37'622			17	-38'984	-24'786	66 3459	8'9	9	- 0'746	-49'674		
12	+20'773	+27'623			11	+53'267	+17'864			9	-38'898	-33'163			12	- 0'250	- 9'078		
9	+22'058	+26'495			10	+55'834	+21'443			9	-37'761	-30'801			15	+ 0'649	-40'514	66 3464	9'5
9	+22'456	+13'779			11	+56'439	+63'113			10	-37'744	-23'147			9	+ 0'796	-39'519		
	151					211					271					331			
11	+22'945	+42'008			9	+57'142	+30'606			9	-37'060	-22'901			11	+ 1'300	-38'153		
9	+23'272	+24'023			15	+57'438	+51'206			9	-35'718	-13'766			13	+ 1'544	- 3'705		
50	+ 23'605	+ 56'153	65 3836	6'8	9	+57'449	+16'859			9	-35'430	- 2'876			10	+ 1'630	-59'264		
10	+24'020	+56'768			9	+57'739	+19'740			13	-35'353	-37'864			13	+ 2'315	-47'684		
9	+24'796	+29'159			24	+ 59'118	+ 52'198	65 3840	8'6	9	-35'251	-12'417			9	+ 2'383	-24'601		
9	+24'896	+45'178			9	+60'828	+31'652			13	-35'014	- 3'672	66 3460	9'9	9	+ 2'384	-42'115		
9	+26'330	+25'214			19	+61'396	+28'189	65 3841	8'9	9	-34'305	-28'997			9	+ 2'783	-42'340		
9	+26'787	+16'085			9	+61'616	+19'490			9	-33'886	-55'689			11	+ 3'248	-38'249		
9	+27'011	+49'077			10	+62'053	+ 5'526			9	-33'274	-34'545			9	+ 3'880	-53'525		
9	+28'138	+50'408			10	+62'784	+20'865			11	-32'938	-42'421			9	+ 4'059	-41'711		
	161					221					281					341			
9	+28'896	+31'797			9	+63'023	+64'480			9	-32'539	-47'689			9	+ 4'686	-21'177		
9	+29'722	+60'713			9	+63'351	+36'351			9	-31'902	- 0'601			10	+ 4'688	- 2'282		
9	+30'369	+47'174			10	+63'798	+ 4'923			11	-31'323	-42'763			12	+ 5'422	-37'393		
9	+30'512	+54'638			9	+64'615	+31'508			10	-30'822	- 7'827			9	+ 5'758	-44'081		
11	+ 30'592	+ 41'186			9	+64'787	+29'167			9	-29'741	- 8'705			9	+ 6'821	-44'954		
9	+30'849	+40'567			9	-64'678	- 7'488			10	-28'727	- 1'230			9	+ 7'728	-36'303		
9	+31'033	+12'616			14	-64'657	-53'057			9	-28'676	-13'942			10	+ 8'341	-31'539		
9	+31'489	+10'977			9	-64'106	-20'423			15	- 28'565	- 24'807	66 3462	9'3	10	+ 8'386	-58'442		
10	+32'058	+63'185			13	-63'908	-25'607			9	-28'464	-40'633			17	+ 8'976	-53'160	66 3465	9'0
14	+32'595	+39'950			10	-63'682	-53'839			9	-27'159	- 8'327			9	+ 9'067	-18'776		

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.
	351,					411,					51,			
9	+ 9.396	-56.672			9	+48.859	-45.680				-36.399	+ 5.572		
9	+10.320	-33.133			15	+48.932	-44.571	66 3469	9.3		-35.548	+17.282		
9	+10.431	-40.803			10	+49.672	-35.034				-35.342	+42.670		
9	+11.480	-34.334			9	+49.828	-21.171				-35.152	+23.209		
9	+11.927	-64.184			9	+50.782	-11.551				-34.618	+14.909		
9	+12.514	- 7.007			9	+51.804	-51.581				-34.057	+63.741		
9	+12.761	- 9.175			9	+53.573	-44.308				-33.835	+62.886		
10	+12.953	-63.239			20	+54.320	- 6.553	66 3470	8.6		-32.487	+47.240		
13	+13.399	-11.538			16	+54.378	-11.638	66 3471	9.5		-32.082	+54.116		
9	+13.584	-54.821			9	+54.508	-26.169				-32.003	+11.180		
	361					421					61			
9	+14.447	-14.926			17	+55.086	-63.442	67 3707	8.9		-31.754	+13.641		
9	+15.120	-60.796			9	+55.905	-12.311				-31.754	+42.708		
9	+15.518	-40.616			9	+56.562	-25.090				-31.732	+11.640		
9	+17.005	-22.988			9	+56.624	-60.489				-30.998	+19.013		
9	+18.942	-26.466			14	+56.644	-42.009				-30.657	+61.946		
10	+20.292	- 8.821			9	+59.324	-23.484				-30.470	+15.190		
10	+20.796	-14.846			11	+59.539	-27.075				-29.113	+38.797	65 3842	9.8
9	+21.147	- 1.242			20	+60.750	- 9.378	66 3472	8.9		-29.053	+ 3.606		
9	+22.190	-53.985			9	+61.442	- 5.540				-27.318	+56.614		
9	+22.538	-49.433			9	+62.394	-36.957				-26.414	+64.880		
	371					431					71			
9	+22.768	-42.314			9	+64.062	- 1.062				-25.674	+24.656		
9	+24.073	-39.739			19	+64.224	-58.265	67 3708	8.9		-25.563	+16.561		
9	+25.565	-41.856			12	+64.430	- 7.516				-25.222	+64.293		
11	+25.841	-36.109									-24.630	+ 5.213		
9	+25.986	-54.199									-23.724	+25.550		
12	+26.489	- 6.987									-23.714	+25.034		
12	+27.137	- 3.386									-23.540	+25.934		
13	+27.705	-58.942									-23.396	+52.463		
9	+28.245	-40.637									-23.142	+53.723		
10	+28.565	-32.275									-22.776	+46.297		
	381										81			
9	+28.602	-64.164									-22.756	+30.150		
21	+29.279	-22.499	66 3466	8.9							-22.381	+17.510		
9	+31.052	-61.701									-21.982	+21.050		
17	+31.117	- 6.075	66 3467	9.2							-20.760	+62.732		
14	+31.346	-59.163	67 3699	9.8							-20.288	+60.672		
9	+31.904	-36.245									-19.664	+42.040		
12	+32.760	-40.088									-19.526	+16.149		
9	+33.179	-52.711									-19.511	+43.324		
10	+35.027	-54.853									-19.307	+60.836		
9	+35.312	-58.244									-18.523	+42.699		
	391										91			
9	+35.462	- 0.037									-17.628	+24.045		
9	+35.934	-21.287									-17.502	+59.480		
9	+36.263	-18.567									-16.096	+42.142		
10	+36.708	-23.067									-15.420	+15.769		
9	+36.912	-45.942									-15.261	+55.096		
9	+37.149	-34.746									-14.527	+40.966		
9	+37.454	-46.233									-14.338	+40.009		
9	+37.901	-11.316									-13.792	+52.161		
9	+38.542	- 0.790									-13.639	+ 8.530		
11	+40.727	- 8.975									-13.633	+48.622		
	401										101			
10	+41.114	-17.728									-12.864	+56.435		
9	+41.941	-44.320									-12.558	+ 4.874		
9	+42.817	-57.391									-12.291	+41.746		
15	+43.918	-38.087	66 3468	9.6							-11.809	+43.297		
9	+44.352	-26.773									-10.632	+46.122		
9	+45.806	-21.627									-10.543	+40.564		
9	+45.902	-60.927									- 9.798	+ 8.227		
11	+47.352	-16.470									- 9.408	+31.484		
10	+47.382	-34.404									- 8.978	+54.450		
9	+48.460	-34.909									- 8.701	+59.259	65 3844	9.6

20^h 6^m, - 66°

RECTANGULAR CO-ORDINATES.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111,					171,					231,					291,			
29	- 8.367	+26.340	65 3843	9.5	9	+24.696	+46.417			20	+48.152	+25.259	65 3848	9.8	15	-59.262	-30.327		
9	- 8.290	+10.342			10	+24.913	+11.053			9	+48.363	+51.756			27	-58.953	-44.865	66 3469	9.3
13	- 8.272	+15.703			10	+25.249	+24.724			11	+49.132	+ 9.116			10	-58.950	-45.983		
9	- 8.264	+61.220			9	+26.402	+58.884			11	+49.463	+10.442			10	-58.207	- 5.917		
10	- 7.110	+33.891			9	+26.465	+43.338			9	+49.602	+20.657			35	-56.290	- 6.567	66 3470	8.6
9	- 7.018	+36.641			9	+26.519	+32.036			9	+49.634	+22.245			26	-55.881	-11.633	66 3471	9.5
34	- 6.687	+42.362	65 3845	8.6	13	+26.661	+28.195			9	+50.049	+56.968			9	-55.553	- 6.947		
9	- 6.528	+52.245			9	+26.755	+20.136			9	+50.919	+52.804			10	-54.832	-47.054		
11	- 6.350	+33.263			9	+26.772	+50.014			9	+50.950	+36.088			9	-54.704	-49.272		
9	- 6.205	+48.616			9	+26.801	+60.437			15	+50.999	+55.853			12	-54.343	-44.270		
	121					181					241					301			
14	- 5.749	+37.435			30	+27.388	+41.219	65 3847	9.2	9	+51.030	+52.943			10	-54.327	-12.190		
9	- 5.524	+26.439			10	+27.501	+38.895			16	+51.129	+64.441			13	-52.739	-24.896		
9	- 4.951	+39.147			9	+28.438	+61.643			17	+52.048	+13.057			26	-51.464	-63.247	67 3707	8.9
9	- 4.466	+62.070			10	+28.758	+55.896			9	+52.991	+15.020			20	-51.455	-41.745		
9	- 4.392	+58.797			10	+29.059	+53.706			11	+53.201	+14.117			11	-50.126	-60.188		
15	- 4.084	+61.842			9	+29.442	+ 4.136			13	+53.231	+ 2.169			11	-50.101	-23.085		
9	- 3.799	+52.418			11	+29.976	+47.766			9	+53.293	+ 3.759			34	-49.695	- 8.925	66 3472	8.9
9	- 0.684	+44.132			13	+30.277	+25.041			10	+53.301	+34.776			15	-49.642	-26.659		
9	- 0.155	+56.242			9	+31.051	+11.252			15	+54.016	+50.756			10	-49.282	- 5.051		
12	- 0.045	+44.883			10	+31.629	+28.920			14	+54.405	+51.800			11	-47.808	-58.469		
	131					191					251					311			
46	+ 1.365	+53.431	65 3846	7.9	12	+32.827	+56.938			9	+54.747	+28.887			13	-47.407	-51.151		
11	+ 1.718	+61.205			9	+33.320	+61.570			9	+54.886	+39.343			12	-46.990	- 0.387		
11	+ 2.898	+51.315			10	+33.468	+51.561			12	+55.232	+30.918			13	-46.752	-59.331		
9	+ 3.093	+18.387			11	+33.510	+55.722			9	+55.320	+53.976			9	-46.738	-40.415		
12	+ 3.403	+48.976			9	+33.536	+20.319			9	+55.632	+ 6.362			9	-46.355	-37.714		
11	+ 6.324	+64.313			10	+34.390	+29.465			11	+55.636	+33.448			16	-46.146	- 6.783		
9	+ 6.618	+50.322			14	+34.736	+33.298			17	+55.856	+ 5.166	65 3849	9.5	13	-46.077	-36.301		
9	+ 6.737	+18.238			9	+34.891	+19.327			16	+56.042	+ 3.721	66 3487	9.9	14	-45.200	-10.719		
9	+ 6.818	+ 8.750			9	+35.288	+37.382			10	+57.341	+18.288			15	-44.135	- 5.177		
9	+ 7.956	+50.436			9	+35.890	+ 6.310			12	+57.707	+17.538			58	-43.114	-39.454	66 3473	8.0
	141					201					261					321			
9	+ 8.768	+ 4.734			9	+37.006	+33.584			9	+58.377	+16.514			120	-42.974	-27.047	66 3474	4.3
9	+10.411	+20.775			15	+37.710	+54.748			15	+58.445	+12.388			19	-42.937	-41.756		
10	+12.068	+55.636			13	+37.823	+31.665			15	+59.176	+15.580			32	-42.722	-57.418	67 3708	8.9
15	+12.248	+11.438			9	+37.917	+39.416			9	+59.249	+40.297			9	-42.459	-62.003		
14	+13.246	+59.691			15	+38.282	+36.958			9	+59.304	+50.948			10	-42.069	-53.299		
9	+13.320	+63.815			9	+38.375	+56.730			9	+59.375	+27.291			12	-41.898	-56.228		
9	+13.561	+54.270			9	+38.516	+22.421			12	+59.798	+51.120			9	-41.454	-13.311		
9	+14.519	+45.426			10	+38.521	+ 6.936			11	+60.311	+35.105			9	-41.326	-26.030		
16	+15.198	+60.291			11	+39.144	+51.466			14	+60.713	+37.745			11	-39.686	-57.060		
14	+15.664	+19.504			11	+40.170	+16.233			9	+61.038	+55.755			10	-38.534	-16.824		
	151					211					271					331			
12	+15.762	+59.967			9	+40.468	+ 9.847			9	+61.458	+ 5.052			9	-38.422	-54.008		
13	+15.774	+56.401			15	+40.518	+51.034			17	+61.992	+58.201			9	-38.160	-50.669		
9	+15.817	+23.019			11	+40.887	+59.892			9	+62.144	+44.347			12	-37.274	-47.770		
11	+15.910	+55.822			9	+40.985	+34.540			9	+63.004	+63.725			14	-37.062	-15.610		
16	+16.004	+46.302			11	+41.149	+44.468			17	+63.327	+ 6.963	65 3850	9.3	9	-36.964	-48.401		
9	+16.587	+ 4.981			9	+41.556	+58.864			9	+63.508	+40.936			13	-36.908	- 0.924		
10	+17.188	+20.627			15	+41.571	+23.145			14	+63.602	+52.961			11	-36.501	-18.062		
9	+18.791	+58.440			9	+41.895	+52.582			9	+63.892	+64.012			13	-36.242	-35.898		
9	+19.537	+33.011			9	+41.995	+59.581			9	+64.389	+ 0.333			17	-35.766	-17.543		
15	+19.666	+49.968			18	+42.244	+54.994			9	+64.842	+28.955			11	-35.260	-52.660		
	161					221					281					341			
9	+20.125	+52.000			14	+43.058	+15.481			12	-64.814	-27.453			14	-34.154	-47.127		
9	+20.690	+52.509			9	+43.117	+ 1.559			20	-64.414	-38.764	66 3468	9.0	20	-33.399	-62.081	67 3710	9.5
9	+20.816	+33.216			9	+43.126	+43.366			9	-64.128	-58.086			9	-33.347	-52.253		
15	+21.129	+45.862			17	+43.338	+14.038			10	-63.712	-22.224			9	-33.186	-43.117		
9	+23.083	+ 5.969			14	+43.400	+42.910			14	-62.543	-16.966			9	-32.956	-46.700		
14	+23.465	+ 0.026	66 3479	9.9	11	+43.424	+39.345			10	-62.063	-48.300			9	-32.591	-19.802		
14	+23.566	+18.749			9	+44.141	+59.398			13	-61.218	-34.843			9	-31.877	- 9.684		
11	+23.741	+56.783			9	+45.654	+25.505			13	-60.110	-35.256			10	-29.050	-45.323		
15	+24.119	+21.465			11	+47.927	+45.212			11	-59.752	-21.465			9	-28.284	-46.603		
11	+24.177	+ 7.883			10	+48.037	+15.181			10	-59.489	-11.790			14	-27.730	-61.964		

RECTANGULAR CO-ORDINATES.

20° 6', - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	351					411					471					531			
13	-27.524	-13.582			10	+7.153	-51.289			13	+37.064	-49.230			10	+60.966	-4.533		
13	-26.813	-50.709			11	+7.507	-25.154			15	+37.094	-1.407			9	+61.412	-0.570		
12	-26.774	-55.882			10	+8.953	-45.323			10	+37.331	-49.926			10	+62.099	-30.138		
12	-26.416	-44.215			9	+9.567	-61.780			13	+38.421	-14.992			9	+63.011	-18.719		
9	-24.158	-12.352			9	+10.415	-40.445			9	+38.499	-0.073			10	+63.017	-18.831		
9	-23.960	-62.464			12	+10.479	-28.224			9	+39.426	-51.048			9	+63.197	-18.282		
13	-23.774	-49.434			10	+10.660	-22.698			9	+39.809	-24.063			9	+63.217	-17.705		
9	-23.772	-30.284			9	+10.733	-9.433			26	+40.608	-46.544	66 3482	9.8	9	+63.322	-29.068		
9	-23.734	-11.280			11	+10.890	-31.740			10	+41.068	-45.340			9	+63.471	-9.534		
14	-23.008	-28.670			10	+11.140	-63.540			12	+41.297	-59.014			9	+63.509	-7.872		
	361					421					481					541			
19	-21.240	-35.699	66 3475	9.9	9	+11.831	-17.675			9	+41.455	-10.472			19	+63.880	-32.381		
10	-20.811	-18.976			14	+12.766	-44.418			9	+41.851	-23.536			9	+63.976	-35.475		
9	-19.702	-23.968			12	+13.008	-55.016			9	+42.318	-20.413			9	+64.247	-53.247	66 3488	9.2
14	-19.554	-4.835			17	+13.063	-63.684			12	+43.133	-42.086			27	+64.937	-37.379		
26	-18.473	-45.386	66 3476	9.8	24	+13.882	-7.669	66 3477	9.9	23	+43.279	-20.226	66 3483	9.9					
10	-17.894	-50.066			9	+14.882	-51.793			17	+43.481	-13.186							
9	-17.457	-28.125			12	+15.349	-54.357			9	+43.633	-21.923							
9	-16.577	-34.054			26	+20.218	-9.927	66 3478	9.2	13	+43.985	-51.395							
9	-16.454	-24.174			12	+21.898	-55.240			9	+44.640	-36.068							
12	-16.107	-43.959			13	+22.130	-9.484			11	+46.030	-20.259							
	371					431					491								
10	-15.652	-32.233			12	+22.255	-21.895			10	+46.220	-53.275							
14	-15.156	-37.868			16	+22.729	-37.599			13	+46.253	-31.690							
13	-14.742	-38.577			10	+23.030	-29.365			10	+46.540	-43.364							
9	-14.490	-33.343			11	+23.031	-60.592			10	+46.912	-13.794							
12	-14.085	-27.830			9	+24.708	-39.157			12	+48.034	-19.700							
14	-13.560	-10.576			15	+25.098	-34.681			9	+48.263	-21.612							
14	-12.633	-49.514			9	+25.135	-43.054			10	+48.356	-0.095							
11	-12.190	-52.264			11	+25.191	-1.485			26	+48.387	-14.724	66 3484	9.6					
10	-11.937	-48.316			14	+27.006	-26.620			12	+48.464	-32.408							
0	-11.910	-49.610			9	+27.053	-52.613			9	+49.096	-30.566							
	381					441					501								
19	-10.848	-25.731			26	+27.232	-30.325	66 3480	9.6	9	+49.864	-33.706							
10	-9.483	-4.708			10	+28.469	-58.856			13	+50.332	-59.116							
10	-9.379	-54.551			9	+28.741	-36.881			9	+50.366	-51.057							
10	-8.922	-20.671			9	+28.792	-28.880			9	+51.133	-15.033							
9	-8.319	-19.312			12	+29.122	-8.335			17	+51.858	-7.427							
13	-8.131	-38.385			11	+29.145	-42.868			13	+51.986	-43.399							
13	-7.871	-17.720			12	+29.592	-18.148			13	+52.141	-15.549							
12	-7.654	-32.860			9	+29.865	-1.586			9	+52.176	-43.330							
9	-6.720	-50.157			9	+30.390	-40.470			44	+52.233	-31.022	66 3485	8.0					
13	-6.031	-4.090			13	+30.550	-60.703			9	+52.683	-20.534							
	391					451					511								
12	-5.255	-52.434			13	+30.798	-64.334			28	+53.046	-8.079	66 3486	9.8					
14	-3.843	-5.223			13	+30.906	-56.067			9	+54.365	-28.146							
9	-2.876	-0.460			9	+31.214	-8.316			9	+55.088	-63.662							
11	-2.782	-36.987			12	+31.388	-62.211			9	+55.219	-27.662							
9	-2.608	-12.396			40	+31.835	-47.824	66 3481	8.2	15	+55.829	-15.348							
14	-2.526	-20.735			9	+32.185	-27.506			9	+56.116	-24.112							
10	-1.890	-43.698			12	+32.822	-16.960			20	+56.986	-58.781							
15	-1.476	-22.345			9	+33.131	-31.845			9	+58.131	-32.964							
9	-0.896	-62.724			15	+33.138	-64.962			10	+58.274	-1.490							
9	-0.712	-42.136			9	+33.196	-37.361			19	+58.586	-1.170							
	401					461					521								
36	-0.162	-57.886	67 3719	8.8	9	+33.570	-61.728			11	+58.997	-45.547							
13	+2.935	-62.816			9	+34.094	-26.398			12	+59.074	-45.509							
16	+3.523	-42.226			9	+34.172	-56.924			10	+59.192	-2.728							
9	+4.048	-57.281			9	+34.457	-53.549			9	+59.727	-54.869							
14	+4.449	-20.711			10	+35.253	-2.803			9	+59.766	-21.830							
9	+4.829	-22.793			9	+35.299	-15.374			9	+60.084	-64.415							
9	+4.852	-1.234			9	+35.745	-52.304			9	+60.541	-31.449							
15	+5.807	-32.781			9	+35.874	-7.989			14	+60.568	-5.746							
11	+5.880	-2.683			56	+35.934	-64.914	67 3730	6.7	9	+60.776	-38.036							
10	+6.210	-35.317			9	+36.284	-41.418			16	+60.844	-13.932							

20^h 24^m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE. 20 ^h 24 ^m , -66°. Plate 3969. 1915, Sept. 7. PROVISIONAL CONSTANTS. a = - .01162 d = + .00056 b = - .00054 e = - .01173 c = - .1387 f = - .0870 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f																			
20	-64.674	+24.737	65 3848	9.8	23	-24.894	+6.088	65 3852	9.0	15	+20.333	+61.231	65 3854	9.6	9	-61.566	-20.122		
14	-64.480	+64.051			10	-24.686	+31.896			12	+21.693	+41.994			9	-60.245	-32.767		
9	-64.096	+14.692			10	-22.632	+47.797			10	+21.922	+1.790			13	-58.668	-7.592		
12	-64.017	+55.483			10	-22.086	+28.818			9	+22.398	+13.289			9	-57.782	-15.680		
10	-62.546	+8.703			11	-20.984	+17.454			11	+22.944	+6.003			20	-57.410	-8.175	66 3486	9.8
10	-62.313	+10.046			9	-20.804	+11.227			9	+23.051	+64.868			50	-56.618	-31.107	66 3485	8.0
13	-60.649	+50.608			13	-19.311	+28.218			10	+23.906	+16.675			9	-55.963	-43.509		
10	-60.343	+51.683			10	-18.839	+30.061			13	+24.006	+37.174			12	-54.102	-15.225		
9	-60.206	+34.615			9	-18.515	+31.021			10	+24.143	+54.028			9	-52.662	-1.237		
18	-59.921	+12.876			13	-18.050	+24.754			9	+24.943	+20.965			15	-52.376	-0.895		
11					10	-17.707	+4.219			9	+25.572	+24.868			9	-51.650	-2.400		
10	-58.811	+13.954			9	-17.102	+2.339			14	+26.524	+29.903			10	-50.075	-5.295		
11	-58.014	+30.908			9	-16.948	+16.750			10	+26.771	+60.536			15	-49.878	-58.464		
11	-57.963	+2.090			16	-16.585	+9.694			60	+27.127	+37.644	65 3855	6.8	9	-49.767	-4.050		
9	-57.807	+33.465			10	-16.444	+2.135			9	+27.391	+41.764			12	-49.224	-13.434		
20	-55.553	+5.251	65 3849	9.5	10	-15.996	+37.911			12	+28.090	+12.506			9	-48.751	-45.083		
18	-55.286	+3.820	66 3487	9.9	14	-15.397	+44.040			9	+29.831	+23.451			9	-46.826	-29.520		
10	-54.900	+51.374			11	-13.941	+19.284			22	+30.176	+61.739	65 3856	9.0	9	-46.702	-18.176		
11	-54.592	+17.737			12	-12.970	+46.379			12	+30.707	+33.680			9	-46.561	-17.625		
9	-53.638	+27.577			13	-11.938	+51.317			9	+31.410	+51.528			15	-44.863	-31.634		
13	-53.494	+12.654			10	-11.828	+60.736			9	+32.099	+47.873			12	-44.345	-8.765		
21					15	-11.626	+30.727			9	+32.704	+50.692			23	-43.441	-36.550	66 3488	9.2
9	-53.261	+35.429			10	-10.951	+9.268			9	+32.783	+48.850			20	-43.148	-11.078		
15	-53.239	+58.601			11	-8.807	+56.324			9	+33.998	+22.964			22	-42.498	-11.072	66 3489	9.5
11	-53.043	+38.100			9	-8.607	+42.064			9	+34.488	+33.580			9	-40.988	-5.792		
16	-52.984	+15.867			10	-7.238	+12.236			11	+38.078	+48.251			20	-40.915	-10.752		
12	-51.249	+53.484			12	-6.828	+5.701			9	+38.699	+27.485			11	-40.747	-22.037		
18	-49.482	+62.329			9	-6.722	+9.106			10	+38.948	+12.714			10	-40.558	-31.413		
22	-48.244	+7.588	65 3850	9.3	9	-5.633	+0.792			12	+39.669	+16.651			9	-38.952	-2.337		
9	-47.840	+56.437			16	-4.957	+36.394			9	+40.441	+8.854			16	-38.620	-31.143		
10	-44.425	+29.916			12	-4.681	+43.329			9	+41.579	+33.491			9	-37.875	-12.440		
11	-44.314	+43.880			9	-4.672	+24.886			10	+42.399	+18.423			10	-37.843	-61.346		
31					9	-1.809	+8.205			20	+44.557	+62.212	65 3858	8.6	10	-37.316	-17.852		
10	-43.957	+7.063			10	-0.535	+11.962			26	+44.594	+62.843	65 3857	9.3	9	-37.021	-64.867		
9	-43.771	+22.639			9	+0.721	+48.838			17	+44.644	+36.687	65 3859	9.6	10	-35.625	-33.966		
11	-43.607	+42.226			13	+1.223	+43.477			11	+45.921	+38.832			15	-35.200	-23.554		
12	-42.804	+22.769			11	+2.262	+26.864			12	+46.563	+9.145			11	-32.364	-53.517		
11	-37.677	+16.740			10	+2.893	+15.603			22	+46.831	+34.446	65 3860	8.9	12	-32.200	-42.045		
9	-36.251	+10.897			9	+3.270	+23.229			12	+47.140	+31.868			21	-31.804	-9.094		
9	-36.001	+19.967			12	+3.287	+32.797			12	+47.855	+15.829			9	-31.614	-60.368		
10	-34.464	+29.380			10	+3.831	+50.038			14	+47.911	+35.656			10	-31.099	-12.718		
22	-34.171	+20.487	65 3851	9.5	10	+3.891	+48.340			11	+48.366	+29.742			9	-29.530	-35.638		
11	-33.450	+57.891			15	+4.732	+3.559			13	+49.442	+5.797			14	-28.557	-59.870		
41					12	+5.133	+27.383			10	+50.373	+14.696			11	-28.036	-20.740		
10	-33.172	+35.651			11	+8.584	+45.224			9	+52.147	+31.612			12	-28.009	-24.270		
10	-32.787	+7.877			9	+9.952	+14.464			14	+52.579	+55.728			9	-25.957	-33.366		
9	-32.004	+37.235			10	+10.036	+61.615			9	+55.444	+41.555			16	-23.355	-24.422		
9	-30.474	+37.119			10	+11.361	+53.036			34	+55.595	+43.141	65 3861	8.9	13	-22.198	-31.715		
9	-29.328	+49.600			10	+11.897	+54.068			9	+57.497	+5.666			20	-21.482	-44.141	66 3490	9.6
9	-29.279	+4.229			14	+12.043	+62.419			22	+58.799	+12.095	65 3863	9.2	9	-21.279	-56.814		
10	-26.254	+60.542			9	+12.344	+33.625			9	+59.714	+33.550			10	-20.480	-18.501		
9	-26.094	+42.869			9	+12.742	+2.402			19	+60.105	+53.684	65 3862	9.0	9	-20.120	-46.190		
10	-25.780	+12.024			18	+12.931	+42.009			12	+60.504	+15.176			12	-19.356	-24.364		
10	-25.259	+35.620			9	+13.190	+46.008			9	+61.476	+57.525			26	-19.067	-11.561	66 3491	8.8
					12	+14.848	+4.663			9	+62.765	+18.519			10	-18.422	-5.800		
					20	+15.038	+20.883	65 3853	9.2	9	+62.883	+50.685			9	-17.894	-26.431		
					10	+17.916	+18.480			10	+63.026	+64.544			9	-17.580	-25.773		
					9	+17.980	+30.554			9	-63.537	-20.815			14	-17.272	-1.845		
					11	+18.055	+0.969			9	-62.507	-32.198			13	-16.938	-39.933		
					10	+20.047	+31.041			23	-61.581	-15.136	66 3484	9.6	12	-16.677	-32.852		

RECTANGULAR CO-ORDINATES.

20^h 42^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	231					291				PLATE CENTRE. 20 ^h 42 ^m , - 66°. Plate 3976. 1915, Sept. 12. PROVISIONAL CONSTANTS. a = - .01140 d = + .00041 b = - .00068 e = - .01147 c = - .0878 f = + .0310 To obtain standard co-ordinates, ξ, η $\xi = x + ax + by + c$ $\eta = y + dx + ey + f$									
10	-16.175	-62.886			10	+25.463	-60.786			12	-8.569	+51.912			12	-8.569	+51.912		
12	-14.621	-16.711			9	+26.334	-4.106			19	-8.465	+38.368			19	-8.465	+38.368		
9	-14.104	-35.401			11	+27.064	-19.314			10	-7.644	+10.824			10	-7.644	+10.824		
11	-11.445	-35.074			9	+27.428	-19.238			9	-6.626	+41.866			9	-6.626	+41.866		
22	-11.427	-57.044	67 3740	9.4	11	+28.011	-16.447			10	-6.184	+17.567			10	-6.184	+17.567		
15	-11.318	-25.683			22	+28.623	-18.398	66 3495	9.3						27	-5.849	+4.392	66 3504	8.8
9	-9.703	-44.735			10	+28.754	-30.233			11	-4.823	+46.144			11	-4.823	+46.144		
12	-8.875	-60.917			11	+29.776	-18.172			9	-4.746	+43.836			9	-4.746	+43.836		
9	-8.688	-10.658			42	+31.267	-53.422	66 3496	8.2	10	-3.673	+14.462			10	-3.673	+14.462		
12	-8.426	-32.323			10	+31.909	-31.951			10	-1.834	+2.056			10	-1.834	+2.056		
	241					301					61					61			
43	-6.563	-8.926	66 3492	7.7	10	+33.259	-9.868			10	-64.950	+29.081			11	-0.374	+44.869		
9	-6.086	-61.258			10	+33.724	-22.561			12	-64.476	+15.175			12	+2.541	+36.612		
12	-1.775	-17.867			11	+33.899	-51.133			14	-62.613	+55.295			10	+4.634	+34.227		
12	-1.624	-7.778			10	+34.340	-60.064			13	-62.181	+5.277			10	+5.994	+14.023		
16	-1.542	-21.659	66 3493	9.6	9	+34.550	-51.576			10	-61.885	+14.216			16	+6.115	+62.947		
9	-1.027	-47.978			13	+35.179	-48.983			9	-61.320	+31.197			20	+6.436	+51.768	65 3867	9.6
9	+1.378	-12.029			10	+35.709	-33.224			9	-58.741	+41.367			10	+7.162	+12.507		
11	+1.792	-3.703			17	+35.842	-48.830	66 3497	9.3	36	-58.715	+42.971	65 3861	8.9	18	+7.416	+25.014		
9	+2.499	-30.433			9	+35.844	-3.591			28	-54.970	+53.795	65 3862	9.0	11	+9.069	+23.045		
9	+2.582	-12.747			10	+36.290	-39.312			9	-54.277	+52.395			36	+9.436	+29.281	65 3868	8.8
	251					311					11					71			
11	+2.624	-28.575			11	+36.454	-42.966			9	-54.145	+5.724			10	+10.203	+20.548		
10	+2.715	-53.811			10	+38.921	-3.621			10	-53.927	+33.693			36	+10.988	+52.088	65 3869	8.4
11	+2.883	-36.107			11	+40.299	-33.004			9	-53.871	+57.711			9	+12.243	+0.456		
9	+3.558	-15.513			9	+40.629	-37.534			24	-53.304	+12.234	65 3863	9.2	9	+12.386	+36.966		
9	+4.181	-60.158			9	+43.380	-29.962			12	-52.819	+64.831			12	+13.376	+12.487		
11	+4.574	-4.156			9	+44.495	-63.330			11	-51.987	+51.006			9	+13.461	+9.317		
9	+4.627	-16.967			10	+44.766	-26.234			14	-51.826	+15.415			12	+13.579	+18.429		
9	+5.413	-57.641			9	+45.560	-17.276			9	-49.799	+18.914			18	+14.025	+50.407		
10	+5.520	-50.989			9	+45.969	-3.554			11	-48.782	+44.648			10	+14.235	+59.395		
48	+6.640	-64.829			9	+46.699	-52.330			14	-45.426	+9.681			30	+15.797	+13.765	65 3871	8.8
	261					321					21					81			
12	+7.064	-16.362			12	+47.024	-1.693			9	-44.163	+28.429			10	+18.154	+52.772		
9	+7.313	-9.589			12	+47.208	-34.190			11	-41.764	+30.860			10	+18.957	+32.018		
11	+7.354	-35.761			12	+47.409	-38.081			13	-39.957	+31.001			12	+19.101	+23.799		
9	+7.615	-27.248			21	+47.482	-59.968	67 3752	8.9	12	-38.440	+19.419			14	+20.389	+23.929		
15	+8.102	-48.851			9	+48.672	-16.182			21	-37.769	+37.721	65 3864	9.4	12	+21.867	+3.586		
15	+9.825	-61.158			12	+50.728	-10.385			11	-36.534	+21.869			12	+21.933	+54.290		
10	+10.037	-22.299			9	+52.726	-3.625			11	-36.002	+50.857			9	+22.252	+37.956		
10	+10.600	-19.051			10	+53.253	-0.537			13	-35.005	+48.332			31	+22.590	+25.656	65 3872	9.0
12	+12.042	-50.859			9	+54.070	-2.274			14	-34.571	+47.206			9	+22.697	+49.000		
9	+12.568	-59.405			12	+54.256	-10.759			13	-34.494	+34.263			14	+25.768	+32.285		
	271					331					31					91			
9	+12.745	-23.987			12	+54.274	-13.209			9	-33.377	+49.470			9	+26.411	+40.526		
9	+13.308	-34.704			12	+55.077	-31.499			13	-31.147	+22.317			20	+29.507	+22.071		
22	+15.071	-56.911	67 3745	9.6	11	+55.994	-20.708			14	-30.443	+61.686			12	+30.086	+0.987		
10	+15.107	-19.935			9	+56.115	-22.720			9	-29.257	+44.134			38	+32.014	+26.713	65 3873	8.5
23	+16.563	-4.729	66 3494	9.2	9	+56.927	-53.747			9	-27.719	+33.984			38	+32.728	+11.008	65 3874	8.3
11	+17.298	-25.958			9	+59.056	-32.976			14	-26.880	+53.203			9	+34.528	+28.936		
9	+17.832	-41.893			13	+59.203	-50.733			48	-25.357	+44.086	65 3865	8.0	10	+34.550	+55.116		
15	+18.369	-54.171			22	+60.573	-17.021	66 3498	9.4	15	-24.442	+8.158			11	+35.470	+5.097		
12	+18.622	-27.950			9	+62.309	-31.915			9	-24.106	+61.695			16	+35.688	+6.713		
12	+19.568	-47.245			9	+63.159	-30.754			18	-22.280	+52.402			13	+39.044	+53.578		
	281					341					41					101			
13	+19.802	-15.845			12	+64.203	-18.229			16	-21.342	+19.182			9	+41.234	+29.593		
18	+21.047	-13.398			9	+64.574	-7.316			18	-20.717	+10.878			44	+42.883	+40.700	65 3875	8.4
9	+21.670	-17.918								11	-20.100	+39.226			34	+43.515	+50.570	65 3876	9.4
9	+21.972	-31.236								13	-19.613	+39.187			10	+44.273	+57.568		
14	+23.249	-44.256								12	-17.747	+58.194			14	+44.954	+18.754		
10	+23.367	-56.922								13	-16.610	+18.571			9	+45.442	+14.557		
9	+23.591	-58.319								22	-15.875	+59.262	65 3866	9.2	11	+45.606	+56.248		
9	+23.698	-5.145								9	-14.542	+6.311			12	+46.068	+33.982		
15	+23.718	-26.671								12	-14.483	+50.926			11	+47.692	+47.010		
9	+24.278	-51.041								10	-10.644	+9.221			12	+49.889	+5.661		

20^h 42^m, - 66°

RECTANGULAR CO-ORDINATES.

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	111					171					231								
17	+49.943	+57.095	65 3877	9.6	9	-21.383	-61.744			10	+31.789	-19.043							
9	+51.504	+12.117			14	-21.359	-57.998			12	+32.011	-13.724							
12	+53.434	+45.345			18	-19.126	-7.876			9	+33.116	-63.654							
10	+56.323	+50.310			9	-19.099	-46.220			13	+33.718	-39.239							
13	+56.329	+2.061			11	-18.799	-57.825			12	+35.348	-60.480							
10	+56.784	+31.487			12	-18.374	-22.996			10	+37.661	-35.701							
11	+56.838	+31.977			12	-17.823	-7.108			20	+37.931	-55.761	67 3765	9.4					
13	+56.906	+59.177			15	-17.757	-62.470			21	+38.703	-19.272	66 3511	9.4					
10	+56.946	+27.759			9	-17.482	-20.168			12	+42.945	-47.802							
20	+57.731	+41.616	65 3878	9.4	18	-15.768	-2.597			12	+43.688	-8.381							
	121					181													
13	+59.287	+34.879			19	-15.503	-15.965	66 3503	9.6	10	+46.076	-39.119							
14	+60.167	+8.922			9	-14.035	-5.617			9	+47.582	-4.143							
9	+60.803	+10.387			10	-13.549	-4.016			19	+47.788	-18.132							
12	+61.810	+37.669			9	-11.613	-47.848			10	+48.239	-29.049							
10	+62.455	+16.447			9	-11.261	-2.100			10	+50.936	-41.207							
13	+63.632	+51.846			12	-10.413	-54.884			12	+51.271	-4.261							
23	+64.399	+3.328	66 3513	9.3	11	-10.273	-41.362			11	+52.244	-26.548							
11	+64.980	+58.599			13	-10.170	-12.017			9	+52.253	-22.878							
12	-64.053	-2.356			12	-9.182	-7.465			15	+52.523	-22.764							
11	-61.555	-34.769			12	-8.092	-9.004			15	+54.012	-46.103							
	131					191													
12	-61.065	-38.626			11	-6.174	-32.623			9	+54.753	-37.021							
13	-59.747	-10.758			10	-4.857	-52.853			9	+55.270	-20.981							
18	-59.452	-60.461	67 3752	8.9	12	-4.624	-20.235			9	+57.849	-8.244							
9	-58.220	-3.886			20	-4.333	-2.596	66 3505	9.6	10	+58.098	-5.722							
10	-57.924	-0.772			13	-4.249	-25.251			11	+58.632	-36.308							
12	-56.194	-10.932			14	-3.795	-24.247			18	+59.501	-28.782	66 3512	9.3					
11	-56.003	-13.324			12	-3.330	-57.481			14	+59.604	-43.937							
10	-53.900	-31.513			15	-0.679	-10.375			9	+61.951	-17.723							
10	-53.745	-20.693			9	+0.343	-63.020			15	+62.515	-17.707							
9	-53.481	-22.687			10	+0.398	-15.327			9	+63.026	-5.989							
	141					201													
16	-50.466	-53.592			9	+0.988	-6.677												
9	-49.820	-32.695			11	+1.865	-63.314												
20	-49.454	-16.689	66 3498	9.4	13	+3.242	-57.809												
12	-48.429	-50.419			20	+3.953	-5.053	66 3506	9.3										
9	-46.669	-31.406			18	+4.072	-4.939												
9	-46.176	-6.715			19	+4.833	-17.839												
10	-45.905	-30.189			13	+4.861	-25.108												
12	-45.755	-17.628			16	+4.917	-63.022												
22	-44.371	-4.354	66 3399	9.0	14	+5.399	-8.687												
12	-43.814	-6.013			26	+7.488	-54.845	66 3507	8.9										
	151					211													
10	-40.680	-17.973			10	+10.686	-39.142												
12	-39.954	-40.854			10	+11.263	-54.664												
13	-39.489	-48.736			10	+12.142	-56.584												
30	-38.781	-52.466	66 3500	8.8	20	+12.620	-38.895	66 3508	9.6										
10	-37.951	-7.602			10	+14.625	-44.603												
9	-37.512	-53.098			12	+14.726	-7.304												
112	-36.468	-34.600			20	+15.167	-36.438	66 3509	9.6										
9	-33.456	-54.473			10	+16.991	-7.119												
10	-32.731	-50.777			9	+17.568	-3.051												
10	-32.628	-3.657			12	+18.472	-30.261												
	161					221													
10	-32.145	-7.582			10	+18.783	-22.695												
9	-31.861	-25.484			9	+19.284	-43.562												
11	-31.388	-41.739			9	+20.090	-20.940												
22	-30.192	-32.495	66 3502	9.2	9	+21.240	-7.149												
19	-28.898	-46.455			9	+21.928	-52.949												
13	-26.540	-14.900			10	+22.097	-35.799												
12	-25.247	-8.229			13	+27.591	-62.257												
10	-25.107	-29.237			13	+27.802	-16.902												
12	-24.498	-10.171			15	+28.643	-40.434												
12	-21.959	-5.107			38	+29.238	-32.399	66 3510	8.2										

PLATE CENTRE.
21^h 0^m, - 66°.
Plate 3971. 1915, Sept. 7.
PROVISIONAL CONSTANTS.
a = - .01175 d = + .00075
b = - .00073 e = - .01147
c = - .0308 f = - .0515
To obtain standard co-ordinates, ξ, η
ξ = x + ax + by + c
η = y + dx + ey + f

12	-61.708	+ 5.381	65 3878	9.4
11	-61.021	+45.208		
10	-60.565	+11.940		
12	-58.551	+59.251		
10	-58.503	+50.371		
9	-57.584	+19.379		
10	-56.694	+31.642		
11	-56.671	+32.141		
18	-56.480	+41.814		
10	-56.259	+27.935		
	11			
9	-55.894	+54.024		
13	-55.044	+ 2.256		
9	-54.694	+15.339		
13	-54.448	+35.198		
9	-53.390	+46.190		
12	-52.128	+38.165		
9	-52.024	+53.881		
15	-51.701	+ 9.375		
13	-51.336	+52.431		
9	-51.170	+10.878		
	21			
10	-51.136	+49.798		
12	-50.455	+59.249		
10	-49.959	+17.047		
22	-47.088	+ 4.102	66 3513	9.3
10	-46.849	+52.998		
9	-46.729	+12.850		
19	-46.366	+20.976		
16	-44.767	+ 0.339		
13	-44.133	+64.494		
10	-43.904	+41.078		
	31			
10	-43.598	+ 1.127		
12	-43.327	+39.579		
9	-41.989	+47.642		
13	-41.805	+27.746		
11	-39.403	+58.362		
19	-39.290	+30.059	65 3879	9.6
9	-38.957	+ 7.573		
15	-35.884	+31.438		
9	-35.713	+26.800		
9	-35.616	+32.557		
	41			
9	-35.506	+39.727		
11	-35.427	+20.158		
16	-35.086	+31.296		
9	-34.833	+35.950		
12	-33.985	+61.166		
11	-33.745	+39.788		
11	-33.450	+44.468		
9	-32.815	+49.753		
11	-32.666	+10.315		
17	-32.612	+ 5.347		

RECTANGULAR CO-ORDINATES.

21^h 0^m, - 66°

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,					171,					231,			
10	-32.607	+35.045			16	+9.866	+16.710	65 3886	10.2	10	+59.081	+35.303			19	-14.171	-36.699	66 3515	9.6
9	-32.481	+36.303			10	+9.918	+9.067			10	+59.121	+10.547			9	-13.219	-24.192		
11	-32.153	+59.395			9	+10.079	+37.648			10	+59.272	+9.546			12	-11.505	-58.402		
10	-30.273	+22.633			17	+10.281	+49.061	65 3887	9.8	13	+59.600	+20.685			11	-11.310	-46.400		
17	-29.673	+24.548			14	+10.975	+59.030	65 3888	10.4	60	+62.224	+53.562	65 3900	5.8	14	-8.902	-35.515		
13	-29.339	+13.964			9	+12.222	+5.518			17	+64.004	+55.244	65 3901	9.2	13	-8.444	-33.279		
18	-26.941	+28.400			12	+12.823	+1.138			11	+64.077	+13.420			12	-8.195	-1.205		
12	-26.241	+41.490			12	+13.277	+22.205			26	+64.118	+25.500	65 3902	9.0	20	-7.478	-6.198	66 3516	9.6
12	-25.492	+0.110			9	+13.367	+25.910			11	-64.804	-48.433			9	-7.226	-21.737		
11	-24.850	+37.850			9	+15.227	+26.683			9	-63.316	-4.552			22	-6.593	-4.608	66 3517	9.4
	61					121					181					241			
10	-23.923	+48.670			9	+16.769	+33.384			20	-62.113	-18.499			11	-5.683	-48.945		
14	-23.462	+64.142			15	+18.125	+39.886	65 3889	10.4	9	-60.860	-29.357			10	-4.758	-23.127		
9	-22.656	+26.415			10	+18.163	+33.018			12	-59.627	-4.413			10	-4.472	-48.728		
11	-22.490	+12.245			9	+19.602	+0.615			10	-57.308	-41.278			13	-4.273	-34.783	66 3518	10.4
10	-22.154	+58.933			9	+19.659	+25.863			9	-57.306	-22.912			12	-3.613	-19.792		
11	-21.404	+14.765			9	+21.295	+12.322			16	-57.063	-22.773			11	-2.847	-18.050		
18	-20.596	+18.720			9	+21.501	+23.961			12	-57.057	-26.567			11	-0.866	-36.607		
9	-19.429	+38.891			13	+21.768	+31.564			12	-56.975	-59.183			9	-0.611	-40.736		
11	-18.219	+53.997			13	+22.689	+24.877			10	-54.454	-20.801			10	+0.371	-22.501		
14	-15.264	+22.098			11	+23.153	+12.126			15	-53.907	-45.941			10	+0.489	-27.612		
	71					131					191					251			
10	-15.139	+15.490			13	+23.500	+28.599			10	-53.819	-36.829			12	+0.788	-3.288		
16	-14.607	+53.619			11	+23.629	+48.758			10	-52.793	-7.905			14	+1.486	-52.820	66 3519	10.4
9	-13.983	+4.737			9	+24.307	+53.048			11	-52.727	-5.379			10	+1.591	-37.426		
19	-13.796	+6.160	65 3880	9.6	10	+24.743	+45.852			9	-51.765	-61.972			9	+1.730	-14.475		
13	-11.225	+40.248			9	+24.880	+3.863			12	-50.009	-35.854			10	+2.899	-43.886		
17	-10.152	+28.924			12	+25.197	+17.521			20	-49.675	-28.278	66 3512	9.3	46	+3.087	-12.088	66 3520	7.4
10	-8.824	+7.158			13	+26.686	+53.086			17	-48.492	-43.381			12	+3.404	-50.555		
9	-8.769	+42.831			9	+27.451	+35.860			9	-48.150	-25.746			10	+3.824	-31.861		
11	-8.286	+43.786			14	+28.115	+40.676	65 3892	10.4	10	-48.012	-17.069			9	+3.995	-11.854		
10	-7.262	+13.396			17	+30.152	+34.994	65 3893	9.6	17	-47.448	-17.013			18	+5.668	-35.799	66 3521	9.6
	81					141					201					261			
14	-7.114	+12.656			12	+31.670	+16.453			10	-43.591	-31.751			9	+6.543	-27.306		
9	-6.880	+31.120			10	+31.697	+38.356			9	-41.749	-31.409			9	+6.830	-15.871		
9	-6.592	+9.250			10	+31.734	+15.229			10	-40.345	-41.563			11	+7.200	-59.441		
10	-6.409	+47.386			9	+32.510	+48.724			12	-38.651	-34.593			10	+7.638	-36.857		
9	-6.407	+45.420			9	+32.711	+61.593			15	-37.037	-63.253			14	+8.633	-42.772		
11	-3.592	+57.848			11	+33.086	+54.614			14	-34.792	-20.268			9	+9.405	-7.197		
9	-2.962	+21.201			11	+34.346	+1.408			13	-34.020	-24.899			10	+9.467	-17.368		
9	-2.911	+38.449			10	+34.730	+4.920			13	-33.510	-5.096			12	+10.569	-2.679		
12	-0.494	+15.192			10	+36.152	+44.204			10	-33.357	-10.892			9	+10.724	-13.326		
19	+0.549	+37.903	65 3881	9.4	9	+36.745	+38.614			18	-33.231	-26.228			12	+12.422	-52.283		
	91					151					211					271			
9	+0.820	+2.176			11	+37.711	+17.273			11	-32.992	-52.219			11	+12.866	-62.929		
11	+1.326	+55.868			13	+37.827	+36.902	65 3894	10.4	10	-32.646	-33.259			12	+13.107	-0.209		
9	+1.719	+40.390			14	+38.523	+28.649			9	-32.169	-29.855			12	+14.272	-37.811		
15	+2.159	+58.862	65 3882	10.4	17	+39.051	+64.483	65 3895	9.4	11	-31.405	-41.075			9	+14.886	-8.439		
10	+2.455	+8.157			12	+41.656	+1.502	66 3535	10.4	14	-30.436	-58.057			9	+15.045	-16.815		
14	+2.657	+63.569	65 3883	10.4	15	+42.028	+59.445	65 3896	9.6	12	-29.606	-14.474			14	+15.221	-5.420		
10	+2.738	+0.874			9	+43.435	+31.597			12	-26.741	-41.073			9	+16.413	-58.627		
10	+2.947	+5.525			10	+43.774	+3.911			13	-25.200	-44.622			16	+17.135	-43.479	66 3523	10.2
10	+4.414	+60.233			9	+45.127	+46.578			10	-25.084	-30.249			22	+17.516	-2.147	66 3522	9.3
9	+4.795	+23.957			11	+49.563	+19.241			13	-24.874	-32.292			22	+18.347	-45.610	66 3524	9.3
	101					161					221					281			
10	+5.126	+3.622			14	+49.738	+4.856			10	-23.813	-56.273			9	+18.443	-39.708		
11	+6.083	+46.973			14	+51.895	+19.124	65 3897	10.4	9	-23.183	-2.364			20	+18.475	-40.911	66 3525	9.6
10	+6.123	+38.500			13	+52.312	+21.063			25	-22.297	-39.453	66 3514	8.9	15	+18.748	-45.735	66 3526	10.2
10	+6.325	+48.446			13	+52.491	+1.844			13	-21.531	-35.565			26	+19.898	-41.955	66 3527	8.6
19	+7.748	+30.836	65 3884	9.2	14	+52.987	+29.872	65 3898	10.4	11	-19.541	-51.316			13	+20.751	-42.975	66 3528	10.4
10	+8.084	+38.764			10	+54.637	+13.461			14	-19.280	-4.063			13	+23.032	-29.323		
9	+8.785	+62.234			13	+56.488	+33.200	65 3899	10.4	13	-19.212	-9.604			10	+23.807	-43.626		
11	+8.963	+41.777			9	+56.602	+23.833			10	-16.306	-5.774			9	+25.130	-29.788		
11	+9.424	+54.618			10	+56.721	+36.914			9	-16.084	-8.772			12	+25.564	-53.817		
9	+9.470	+21.407			11	+58.393	+17.528			9	-14.434	-31.781			14	+27.286	-31.532	66 3529	10.4

327

C.P.D.					C.P.D.					C.P.D.					C.P.D.				
Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.	Diam.	x	y	No.	Mag.
PLATE CENTRE.																			
21h 36m, - 66°.																			
Plate 428. 1892, Sept. 13.																			
PROVISIONAL CONSTANTS.																			
a = - .01144 d = - .00043																			
b = + .00036 e = - .01135																			
c = - .0163 f = - .0830																			
To obtain standard co-ordinates, ξ, η																			
$\xi = x + ax + by + c$																			
$\eta = y + dx + ey + f$																			
9	-60.751	+36.891			9	-16.560	+48.607			9	+51.029	+57.183			11	+10.685	-1.632		
10	-57.972	+20.504			9	-14.538	+12.022			19	+51.205	+28.069	65 3956	8.6	10	+10.854	-48.722		
9	-57.137	+27.438			16	-14.184	+48.621	65 3940	9.9	9	+52.381	+9.814			10	+11.784	-24.445		
9	-56.317	+43.061			9	-14.025	+27.491			9	+52.929	+6.220			9	+18.183	-41.927		
20	-55.949	+45.212	65 3928	9.6	9	-11.432	+51.128			10	+54.561	+49.746	65 3957	9.8	9	+18.439	-41.748		
					9	-10.188	+58.540			15	+56.541	+12.285	65 3958	10.0	9	+18.587	-40.618		
10	-54.166	+25.324			9	-9.472	+40.192			20	+62.017	+48.220	65 3959	8.8	15	+18.705	-45.489	66 3582	10.2
11	-53.229	+14.078			15	-9.250	+13.821	65 3941	10.2	15	+62.279	+4.163	66 3594	9.3	16	+20.385	-50.325	66 3583	9.6
15	-52.015	+45.814	65 3929	10.2	11	-9.200	+30.873	65 3942	10.4	11	+63.224	+24.582	65 3961	9.8	16	+21.741	-32.673	66 3584	9.6
9	-51.484	+10.506			9	-7.696	+21.020			15	+63.571	+3.039	66 3595	9.4	12	+23.434	-62.211	67 3835	10.2
15	-50.637	+38.879	65 3930	10.2	61					121					181				
9	-50.621	+14.587			9	-4.747	+62.864			9	+63.948	+49.962	65 3960	10.2	15	+28.920	-36.090	66 3585	9.6
9	-50.319	+33.341			9	-3.376	+46.237			12	-64.718	-45.625	66 3572	9.6	10	+28.924	-19.078		
9	-49.617	+17.379			15	-2.002	+11.077	65 3943	10.4	11	-61.212	-5.063			9	+32.093	-19.275		
9	-49.147	+43.080			17	+0.198	+5.624	66 3578	9.6	16	-59.730	-42.800	66 3573	9.2	14	+32.482	-32.197	66 3587	10.2
9	-49.077	+39.528			10	+0.228	+46.958			9	-59.546	-5.903			10	+35.552	-58.439		
					15	+0.287	+36.690	65 3944	10.4	11	-59.293	-3.280			12	+35.783	-7.282		
9	-47.675	+23.768	65 3931	9.2	9	+0.416	+32.165			15	-57.520	-10.215	66 3574	9.6	12	+37.684	-36.599	66 3588	10.4
15	-46.611	+9.283	65 3932	10.4	10	+0.486	+40.269			15	-55.960	-14.071	66 3575	10.2	9	+38.589	-38.697		
10	-45.949	+51.491			9	+1.802	+57.995			9	-54.820	-10.063			11	+44.081	-23.931	66 3590	10.2
20	-42.513	+30.908	65 3933	9.0	11	+3.972	+29.448			11	-54.786	-62.655	67 3810	9.6	15	+47.181	-1.139	66 3591	9.7
26	-41.446	+14.161	65 3934	9.0	71					131					191				
9	-41.083	+43.918			9	+4.226	+37.288			11	-54.416	-38.942			11	+48.032	-19.941		
15	-39.225	+49.486	65 3935	10.4	16	+6.766	+47.008	65 3945	9.4	9	-47.935	-10.455			15	+49.880	-14.129	66 3592	9.4
10	-38.487	+13.924			9	+10.119	+22.095			9	-46.880	-6.886			10	+49.484	-57.955	67 3839	10.2
51	-37.650	+43.828	65 3937	5.9	18	+10.946	+14.592	65 3946	9.4	9	-43.520	-4.945			9	+50.205	-4.835		
9	-37.646	+38.715			9	+11.469	+33.038			9	-42.620	-19.220			9	+50.689	-19.372		
					9	+12.579	+50.763			10	-42.547	-46.257			9	+50.745	-23.308		
16	-37.297	+21.797	65 3936	9.9	9	+12.595	+10.253			9	-42.153	-43.515			12	+51.682	-60.217	67 3840	10.0
9	-37.213	+11.671			11	+13.868	+25.037			9	-41.185	-1.465			9	+54.183	-33.707		
9	-35.383	+44.226			9	+18.697	+6.958			11	-39.772	-26.236			14	+58.821	-28.727	66 3593	9.6
9	-35.296	+46.630			15	+20.477	+42.387			17	-39.162	-55.584	67 3816	9.2	14	+64.182	-52.845	66 3597	8.9
9	-34.356	+22.735			81					141									
9	-33.955	+26.764			9	+20.844	+28.009			10	-35.988	-17.035							
10	-30.937	+6.505	65 3938	9.4	9	+21.271	+24.017			14	-35.615	-47.642							
9	-30.388	+44.313			9	+22.486	+25.959			10	-33.489	-14.979	66 3576	10.4					
9	-30.233	+1.583			9	+22.605	+44.760			9	-26.412	-49.611							
					9	+23.054	+14.294			11	-24.322	-18.042							
9	-27.349	+12.949			16	+23.916	+30.493	65 3947	9.6	10	-23.960	-6.525							
9	-25.690	+23.065			15	+24.183	+47.008	65 3948	10.2	13	-22.497	-38.168							
10	-24.743	+26.638			20	+24.194	+28.903	65 3949	9.0	10	-19.189	-15.538							
14	-24.316	+23.019			9	+25.331	+7.879			10	-17.552	-24.029							
9	-24.111	+50.822			9	+26.421	+40.392			12	-17.449	-43.689							
41																			
9	-24.105	+13.839			9	+27.731	+0.113			10	-17.303	-12.200							
15	-23.863	+37.894			9	+29.557	+1.925			9	-14.576	-5.292							
9	-23.279	+0.604			36	+30.078	+1.895	66 3586	7.2	11	-13.255	-4.350							
9	-23.116	+4.600			9	+30.490	+22.184			9	-10.551	-56.939							
9	-21.627	+14.778			15	+33.223	+34.862	65 3950	10.0	11	-10.498	-13.952							
					9	+35.974	+64.484			9	-10.336	-13.135							
17	-20.857	+41.897	65 3938	9.4	10	+36.399	+26.641			9	-8.156	-62.342							
9	-20.589	+47.780			11	+36.852	+6.235			10	-6.986	-54.027							
9	-20.502	+27.252			9	+37.431	+15.723			9	-6.791	-61.281							
9	-17.745	+40.093			9	+38.332	+36.110			14	-6.194	-54.237	67 3824	10.1					
15	-16.792	+43.715	65 3939	10.4	101					161									
					10	+39.639	+36.072			9	-5.731	-23.136							
					48	+39.827	+49.635	65 3951	7.0	12	-4.530	-37.674	66 3577	10.2					
					11	+40.522	+5.808	66 3589	10.2	11	-2.358	-34.441							
					11	+41.596	+9.048	65 3952	10.2	10	+0.296	-32.116							
					9	+43.128	+38.879			12	+2.355	-55.966							
					15	+46.072	+33.202	65 3953	9.6	14	+2.456	-11.953	66 3579	10.4					
					14	+46.484	+30.412	65 3954	10.0	16	+3.892	-45.317	66 3580	9.9					
					9	+49.327	+33.660			12	+7.045	-64.940	67 3828	10.4					
					10	+49.799	+43.089	65 3955	10.2	15	+7.214	-41.602	66 3581	9.6					
					9	+50.797	+38.638			12	+9.041	-17.791							

21^h 54^m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.														
Diam.		x		y		No.		Mag.		Diam.		x		y		No.		Mag.		Diam.		x		y		No.		Mag.	
PLATE CENTRE.					51,					111,					PLATE CENTRE.														
21 ^h 54 ^m , - 66°.					14 + 5.164 + 37.266 65 3986 10.0					9 - 26.162 - 8.505 9 - 25.120 - 46.676 9 - 22.256 - 9.753 9 - 21.393 - 30.852 11 - 20.141 - 2.251 66 3602 9.6					22 ^h 12 ^m , - 66°.														
Plate 429. 1892, Sept. 13.					9 + 7.579 + 48.780 10 + 8.817 + 8.254 10 + 8.850 + 6.825 9 + 10.521 + 12.031					9 - 18.033 - 13.693 18 - 17.621 - 2.153 20 - 15.547 - 33.961 9 - 13.065 - 18.093 9 - 11.938 - 13.689					Plate 4090. 1917, Oct. 10.														
PROVISIONAL CONSTANTS.					9 + 11.793 + 34.511 9 + 15.443 + 7.942 10 + 16.792 + 60.487 9 + 16.892 + 6.834 9 + 19.264 + 62.984					66 3603 9.3 66 3604 8.8					PROVISIONAL CONSTANTS.														
a = - .01146 d = - .00125					61					66 3605 8.9 66 3606 8.4					a = - .01137 d = + .00023														
b = + .00119 e = - .01127					38 + 19.903 + 47.955 9 + 20.510 + 10.553 9 + 24.515 + 11.497 11 + 24.855 + 19.494 9 + 25.637 + 62.553					9 - 11.228 - 52.031 18 - 8.283 - 45.360 24 - 5.900 - 17.515 9 - 4.636 - 7.944 9 - 1.368 - 44.164					b = - .00009 e = - .01159														
c = + .0319 f = - .1032					9 + 27.061 + 31.819 9 + 29.184 + 45.638 9 + 29.321 + 44.290 18 + 31.961 + 26.084 10 + 34.854 + 21.413 9 + 35.051 + 26.369 9 + 35.076 + 28.013 18 + 35.505 + 32.315 9 + 36.606 + 43.855 16 + 39.351 + 24.607					10 - 1.186 - 35.156 9 + 0.428 - 6.872 18 + 5.497 - 12.727 9 + 5.894 - 0.259 10 + 7.990 - 28.901 9 + 8.002 - 27.213 12 + 11.459 - 64.367 9 + 11.919 - 58.921 9 + 12.821 - 58.051 9 + 13.191 - 16.752					c = + .0176 f = + .1326														
To obtain standard co-ordinates, ξ, η					71					10 + 16.612 - 63.105 11 + 18.662 - 19.077 9 + 19.581 - 46.438 10 + 22.336 - 29.216 9 + 26.393 - 24.885 28 + 27.585 - 9.385 9 + 28.482 - 4.096 9 + 29.653 - 24.751 15 + 29.904 - 27.645 10 + 30.869 - 51.062					To obtain standard co-ordinates, ξ, η														
ξ = x + ax + by + c					81					9 + 16.612 - 63.105 11 + 18.662 - 19.077 9 + 19.581 - 46.438 10 + 22.336 - 29.216 9 + 26.393 - 24.885 28 + 27.585 - 9.385 9 + 28.482 - 4.096 9 + 29.653 - 24.751 15 + 29.904 - 27.645 10 + 30.869 - 51.062					ξ = x + ax + by + c														
η = y + dx + ey + f					91					9 + 39.760 - 64.509 9 + 41.054 - 4.836 10 + 41.741 - 50.294 9 + 45.133 - 14.641 15 + 48.650 - 52.357 9 + 52.671 - 41.575 13 + 53.604 - 25.533 9 + 56.382 - 43.164 10 + 56.515 - 27.221 16 + 56.684 - 1.415 20 + 56.847 - 51.388 9 + 57.009 - 24.047 13 + 58.084 - 41.426 11 + 58.537 - 49.106 9 + 59.484 - 1.213					η = y + dx + ey + f														
9 - 64.500 + 42.467 65 3955 10.2					9 + 27.061 + 31.819 65 3991 10.2					9 + 16.612 - 63.105 66 3613 10.0					13 - 63.154 + 35.205 65 3999 10.0														
20 - 62.014 + 27.590 65 3956 8.6					9 + 29.184 + 45.638 65 3992 10.2					11 + 18.662 - 19.077 66 3614 10.2					11 - 62.753 + 13.127 65 4000 8.8														
9 - 60.432 + 9.436 65 3957 9.8					9 + 29.321 + 44.290 65 3993 9.0					9 + 19.581 - 46.438 66 3615 8.0					11 - 61.137 + 19.455 65 4001 9.4														
11 - 60.218 + 49.444 65 3958 9.8					10 + 34.854 + 21.413 65 3994 10.2					9 + 29.653 - 24.751 66 3616 10.1					22 - 59.652 + 15.145 65 4003 9.6														
9 - 59.511 + 9.468 65 3959 8.8					9 + 35.051 + 26.369 65 3995 9.1					10 + 30.869 - 51.062 66 3617 10.2					15 - 58.009 + 63.778 65 4004 10.2														
9 - 58.705 + 5.920 65 3960 10.2					16 + 39.351 + 24.607 65 3996 8.2					9 + 39.760 - 64.509 67 3861 10.2					11 - 55.934 + 9.737 65 4006 8.6														
10 - 55.539 + 12.235 65 3961 9.8					9 + 40.495 + 11.173 65 3997 10.2					9 + 41.054 - 4.836 66 3622 10.2					10 - 52.743 + 27.952 65 4008 9.7														
9 - 54.434 + 18.091 65 3962 9.3					9 + 40.768 + 23.324 65 3998 10.0					10 + 41.741 - 50.294 66 3623 10.2					10 - 51.841 + 25.238 65 4010 9.6														
19 - 52.677 + 48.466 65 3963 9.4					10 + 42.220 + 48.162 65 3999 10.0					9 + 45.133 - 14.641 66 3624 9.4					11 - 51.330 + 35.233 65 4012 10.2														
9 - 50.862 + 50.324 65 3964 9.6					11 + 43.233 + 42.764 65 4000 8.8					15 + 48.650 - 52.357 66 3625 10.1					9 - 50.660 + 10.190 65 4013 9.6														
11 - 49.769 + 24.961 66 3594 9.3					9 + 43.541 + 19.921 65 4001 9.4					9 + 52.671 - 41.575 66 3626 9.4					13 - 45.532 + 56.669 65 4014 10.2														
15 - 49.234 + 4.549 65 3965 10.2					9 + 46.010 + 23.708 65 4002 9.7					13 + 53.604 - 25.533 66 3627 9.1					9 - 50.062 + 12.424 65 4015 9.6														
10 - 48.115 + 42.462 65 3966 10.0					9 + 49.319 + 13.902 65 4003 9.8					10 + 56.382 - 43.164 66 3628 9.0					11 - 40.771 + 48.441 65 4016 10.2														
15 - 47.871 + 3.520 66 3595 9.4					9 + 50.484 + 35.918 65 4004 9.8					16 + 56.684 - 1.415 66 3629 10.1					20 - 46.516 + 43.478 65 4017 9.6														
9 - 47.384 + 42.940 65 3967 10.0					19 + 52.571 + 15.670 65 4005 8.8					9 + 56.382 - 43.164 66 3630 8.1					13 - 44.429 + 59.149 65 4018 10.2														
11 - 47.091 + 39.926 65 3968 10.2					12 + 57.636 + 64.087 65 4006 8.6					9 + 57.009 - 24.047 66 3631 9.3					9 - 44.250 + 47.599 65 4019 9.6														
13 - 46.993 + 42.050 65 3969 10.0					9 + 58.897 - 1.839 65 4007 9.4					13 + 58.084 - 41.426 66 3632 9.3					30 - 43.928 + 54.652 65 4020 10.2														
9 - 46.666 + 19.182 65 3970 9.8					9 - 61.681 - 20.536 65 4008 9.7					16 + 59.484 - 1.213 66 3633 9.3					14 - 43.407 + 30.258 65 4021 10.2														
9 - 44.978 + 32.011 65 3971 9.8					91					9 + 60.006 - 59.361 67 3865 10.1					10 - 42.667 + 36.031 65 4022 10.2														
10 - 42.362 + 64.261 65 3972 10.0					15 - 60.779 - 14.631 66 3592 9.4										10 - 42.667 + 36.031 65 4023 10.2														
21 - 42.292 + 49.925 65 3973 9.8					12 - 60.620 - 5.313 66 3593 9.6										15 - 58.009 + 63.778 65 4024 10.2														
10 - 40.354 + 27.594 65 3974 10.2					9 + 49.319 + 13.902 66 3594 9.8										9 - 40.388 + 5.293 65 4025 10.2														
9 - 39.220 + 10.773 65 3975 9.4					9 + 50.484 + 35.918 66 3595 8.9										11 - 40.343 + 30.553 65 4026 10.2														
11 - 37.742 + 59.722 65 3976 8.4					9 + 51.366 + 20.104 66 3596 8.9										9 - 40.343 + 30.553 65 4027 10.2														
10 - 37.537 + 63.129 65 3977 10.0					19 + 52.571 + 15.670 65 4000 8.8										11 - 39.563 + 29.827 65 4028 10.2														
11 - 36.560 + 4.116 66 3600 9.8					12 + 57.636 + 64.087 65 4001 9.4										9 - 38.682 + 54.704 65 4029 10.2														
10 - 32.622 + 16.853 65 3970 10.2					9 + 62.274 + 35.138 66 3591 9.7										20 - 36.353 + 1.275 65 4030 10.2														
16 - 32.080 + 56.512 65 3971 9.6					9 - 61.681 - 20.536 65 4002 9.7										14 - 34.552 + 40.812 65 4031 10.2														
9 - 31.761 + 63.146 65 3972 10.1					91										11 - 33.720 + 55.044 65 4032 10.2														
11 - 30.646 + 19.596 65 3973 9.4					15 - 60.779 - 14.631 66 3592 9.4										9 - 32.465 + 6.297 65 4033 10.2														
10 - 29.308 + 11.551 65 3974 10.2					9 + 46.010 + 23.708 65 4003 9.8										11 - 31.631 + 28.357 65 4034 10.2														
14 - 24.161 + 46.646 65 3975 9.4					9 + 49.319 + 13.902 66 3594 9.8										11 - 30.693 + 51.273 65 4035 10.2														
20 - 23.977 + 56.173 65 3976 8.4					9 + 50.484 + 35.918 66 3595 8.9										10 - 30.606 + 41.728 65 4036 10.2														
12 - 23.129 + 39.103 65 3977 10.0					9 + 51.366 + 20.104 66 3596 8.9										13 - 30.495 + 32.829 65 4037 10.2														
18 - 22.511 + 14.388 65 3978 9.1					14 - 50.294 - 28.511 66 3593 9.6										9 - 29.665 + 31.267 65 4038 10.2														
9 - 21.974 + 14.654 65 3979 9.1					9 - 50.043 - 14.106 66 3594 9.8										17 - 28.872 + 64.877 65 4039 10.2														
9 - 18.965 + 33.870 65 3980 9.1					12 - 44.581 - 17.401 66 3596 9.8										11 - 28.470 + 24.795 65 4040 10.2														
9 - 18.576 + 41.039 65 3981 10.2					15 - 43.215 - 52.170 66 3597 8.9										11 - 27.387 + 10.446 65 4041 10.2														
11 - 17.815 + 55.951 65 3982 10.2					9 - 42.415 - 3.410 66 3598 9.2										14 - 27.340 + 54.789 65 4042 10.2														
12 - 17.359 + 25.558 65 3983 9.8					101										9 - 27.000 + 46.076 65 4043 10.2														
21 - 12.255 + 55.637 65 3984 8.6					15 - 42.288 - 3.259 66 3599 9.2										9 - 24.629 + 12.190 65 4044 10.2														
19 - 4.330 + 34.083 65 3985 9.1					9 - 38.894 - 54.512 67 3845 10.2										13 - 24.215 + 11.042 65 4045 10.2														
9 - 2.857 + 39.970 65 3986 10.0					15 - 36.585 - 38.511 66 3599 9.0										12 - 23.399 + 45.781 65 4046 10.2														
14 + 1.269 + 2.998 66 3609 9.8					12 - 33.601 - 56.501 67 3846 9.2										13 - 23.292 + 26.224 65 4047 10.2														
9 + 2.899 + 55.893 65 3985 7.6					11 - 33.086 - 24.453 66 3601 10.2										10 - 23.181 + 51.771 65 4048 10.2														
32 + 3.106 + 17.239 65 3985 7.6					9 - 31.017 - 40.659 66 3601 10.2										10 - 22.869 + 8.277 65 4049 10.2														
9 + 3.643 + 51.910 65 3984 10.0					9 - 30.464 - 35.334 66 3601 10.2										18 - 22.620 + 8.706 65 4050 10.2														
9 + 4.686 + 43.439 65 3984 10.0					9 - 29.902 - 3.399 66 3601 10.2										15 - 22.261 + 0.376 65 4051 10.2														
					11 - 28.394 - 22.133 66 3601 10.2										9 - 21.884 + 51.210 65 4052 10.2														
					9 - 27.261 - 15.978 66 3601 10.2																								

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51					111					171					231			
28	-21.751	+41.752	65 4014	8.6	10	+31.768	+22.016			12	-36.699	- 8.013			18	+16.606	- 3.435	66 3655	9.7
11	-20.167	+50.583			12	+31.886	+ 2.103			10	-36.618	- 8.186			18	+17.406	-42.090	66 3656	9.6
15	-19.952	+22.382	65 4015	10.0	13	+31.915	+21.945	65 4033	10.2	23	-36.255	-50.072	66 3638	9.0	11	+17.607	-16.367		
22	-19.465	+ 6.880	66 3642	9.3	12	+33.694	+64.007			10	-34.067	-42.289			9	+18.234	-49.866		
11	-18.871	+ 4.903			18	+33.893	+62.213	65 4034	9.6	11	-32.914	- 1.616			11	+19.061	-15.397		
10	-18.525	+27.337			12	+34.028	+ 3.802			9	-32.850	- 1.452			12	+20.131	-56.260	67 3888	10.2
12	-18.419	+38.499			18	+35.799	+25.051	65 4035	9.8	15	-31.584	-57.742	67 3869	9.2	12	+20.482	-30.294	66 3657	10.2
12	-12.557	+ 4.884			9	+35.847	+38.139			11	-30.876	-19.595			9	+21.248	-29.731		
11	-10.078	+17.446			13	+36.516	+59.206			12	-30.671	-11.956			10	+23.438	-27.639		
40	- 9.635	+29.157	65 4016	7.6	14	+37.306	+44.014	65 4036	10.0	10	-30.474	-32.769			10	+24.096	-32.792		
	61					121					181					241			
12	- 8.158	+39.491			15	+38.578	+57.048	65 4037	10.1	22	-29.854	-26.229	66 3640	9.0	18	+26.731	- 1.819	66 3658	9.7
11	- 8.023	+22.107			21	+39.078	+46.040	65 4038	9.2	9	-29.208	-60.444			12	+29.033	-47.997		
12	- 7.582	+14.568			18	+41.513	+15.569	65 4039	9.7	10	-27.114	- 5.385			18	+29.862	-32.212	66 3659	9.8
11	- 7.210	+43.282			20	+43.139	+15.473	65 4040	9.2	14	-24.323	-58.075	67 3875	9.6	22	+29.889	-47.039	66 3660	8.9
11	- 7.200	+13.243			18	+43.787	+35.369	65 4041	9.6	14	-24.166	-54.230	67 3876	9.6	11	+30.873	-25.123		
30	- 5.593	+57.097	65 4017	8.2	12	+46.194	+14.652			10	-21.239	-33.569			10	+30.894	- 4.728		
12	- 3.870	+54.087			12	+46.302	+19.189			19	-17.924	- 5.910	66 3644	9.6	13	+31.499	-14.105		
12	- 3.321	+57.772			13	+46.370	+64.333			13	-17.839	-43.154	66 3643	10.2	38	+33.474	- 8.233	66 3661	7.0
16	- 2.534	+42.992	65 4018	10.2	10	+48.031	+11.629			9	-16.993	-33.042			20	+34.374	-39.245	66 3662	9.2
12	- 2.001	+23.417			15	+48.235	+42.653	65 4042	10.1	9	-16.122	-54.130			11	+36.430	-42.038		
	71					131					191					251			
11	- 1.918	+43.591			12	+48.512	+48.170			9	-14.221	-62.231			10	+37.269	- 7.919		
9	- 1.131	+ 1.611			14	+49.260	+64.550	65 4043	10.2	9	-13.615	- 9.639			19	+37.574	-26.880	66 3663	9.4
20	- 0.469	+17.840	65 4019	9.4	100	+51.791	+30.874	65 4044	5.0	18	-13.085	- 5.508	66 3645	9.8	9	+37.859	-55.256		
11	- 0.320	+43.520			22	+54.628	+44.341	65 4045	9.1	15	-10.311	- 7.794	66 3646	9.8	19	+38.353	-11.406	66 3664	9.2
11	- 0.207	+ 1.972			13	+57.373	+23.536			13	- 9.953	-38.029	66 3647	10.2	10	+38.702	- 7.633		
10	- 0.133	+17.593			11	+59.803	+34.635			9	- 9.462	- 5.854			12	+39.290	- 1.131		
12	+ 1.131	+50.280			15	+60.253	+28.813			9	- 9.149	-57.286			19	+40.521	-59.536	67 3894	9.1
10	+ 1.801	+29.597			13	+60.303	+28.739	65 4046	9.4	11	- 8.154	- 7.297			17	+43.057	-18.010	66 3665	9.8
9	+ 2.494	+28.704			38	+61.695	+53.584	65 4047	8.6	18	- 7.993	-43.098	66 3648	9.6	9	+45.226	-20.233		
14	+ 2.567	+20.861	65 4020	10.2	9	+61.728	+ 1.135			10	- 7.271	- 4.016			17	+46.294	-43.564	66 3666	9.6
	81					141					201					261			
13	+ 4.823	+49.081			17	+63.706	+ 9.984	65 4048	9.6	11	- 5.844	-46.915			11	+47.446	- 7.994		
18	+ 6.161	+40.787	65 4021	9.7	12	-64.941	-15.628	66 3623	10.2	13	- 5.446	- 8.500	66 3649	10.2	17	+47.558	-28.853	66 3667	9.7
9	+ 7.330	+13.558			16	-58.782	-52.995	66 3624	9.4	12	- 4.706	-59.631			11	+50.378	-41.288		
32	+ 7.951	+15.988	65 4022	8.0	10	-58.103	-62.147			10	- 4.504	-50.507			21	+50.677	-36.857	66 3668	9.0
11	+ 8.598	+ 7.312			17	-55.721	-25.882	66 3626	9.4	9	- 3.626	- 6.308			9	+51.760	- 5.923		
9	+ 9.795	+52.900			12	-55.537	-41.943	66 3625	10.1	11	- 1.998	-30.411			20	+55.457	- 7.101	66 3669	9.3
12	+10.148	+51.470			19	-54.336	- 1.613	66 3627	9.1	10	+ 1.074	-54.591			11	+56.230	-61.985		
12	+11.511	+51.084			12	-52.705	-27.356	66 3628	10.0	14	+ 3.354	-30.509	66 3650	10.0	10	+59.392	-57.941		
14	+11.833	+49.649	65 4023	10.2	10	-52.459	-56.156			10	+ 3.621	-16.855			10	+59.476	- 3.390		
10	+12.235	+28.699			11	-52.431	-24.167			9	+ 3.886	-17.215			20	+61.736	-45.935	66 3670	8.7
	91					151					211					271			
15	+12.820	+54.062	65 4024	10.2	12	-51.720	-43.289	66 3629	10.1	20	+ 3.954	-42.512	66 3651	9.2	9	+62.226	-40.839		
12	+14.714	+ 8.963			12	-51.570	- 1.217			13	+ 6.269	-50.190			9	+62.685	- 7.504		
12	+15.579	+25.704			34	-50.675	-51.466	66 3630	8.1	10	+ 6.892	-26.039			12	+62.945	-35.191		
10	+15.769	+13.473			18	-50.149	-41.415	66 3631	9.6	10	+ 7.724	-34.587			14	+63.204	-27.826	66 3671	9.7
12	+16.855	+ 7.174			17	-49.205	-49.042	66 3632	9.3	9	+ 8.555	-32.121			10	+64.786	- 5.180		
9	+16.993	+11.480			14	-46.916	-59.209	67 3865	10.1	11	+ 8.652	-42.942			12	+64.820	-47.736	66 3673	10.0
11	+20.567	+56.854			9	-46.283	-31.642			9	+ 8.660	-30.661							
15	+22.375	+18.925	65 4026	10.1	11	-46.116	-55.095			9	+10.929	-22.810							
14	+22.427	+59.594	65 4025	10.2	9	-45.505	-31.375			9	+11.675	- 9.681							
10	+22.774	+31.270			18	-44.661	- 5.223	66 3633	9.6	10	+12.654	-36.621							
	101					161					221								
24	+24.322	+20.643	65 4027	9.0	12	-43.983	-23.783	66 3634	10.2	11	+13.963	-10.836							
18	+24.654	+20.369	65 4028	9.8	9	-43.739	-34.791			17	+14.734	-16.894	66 3652	9.6					
9	+25.089	+14.206			9	-43.214	-48.691			12	+14.904	-36.153							
20	+25.387	+39.110	65 4029	10.0	12	-43.113	-17.525	66 3635	10.2	18	+15.198	-46.531	66 3653	9.4					
9	+25.959	+35.137			16	-41.207	- 6.485	66 3636	10.0	10	+15.674	-21.149							
12	+27.742	+50.866			11	-41.042	-47.797			10	+15.742	-23.200							
13	+28.087	+16.782	65 4030	10.2	13	-39.227	-13.354			9	+15.794	-57.051							
12	+28.913	+17.467			10	-38.872	-42.557			10	+15.898	-34.546							
36	+29.396	+ 8.145	65 4032	7.5	30	-38.173	-10.550	66 3637	8.4	10	+16.043	-56.231							
26	+29.782	+63.240	65 4031	9.1	10	-37.205	-27.010			14	+16.298	-25.772	66 3654	9.8					

22^h 30^m, - 66°

RECTANGULAR CO-ORDINATES.

C.P.D.					C.P.D.					C.P.D.					C.P.D.														
Diam.		x		y		No.		Mag.		Diam.		x		y		No.		Mag.		Diam.		x		y		No.		Mag.	
PLATE CENTRE.					PLATE CENTRE.					PLATE CENTRE.					PLATE CENTRE.														
22 ^h 30 ^m , - 66°.					22 ^h 48 ^m , - 66°.					22 ^h 30 ^m , - 66°.					22 ^h 48 ^m , - 66°.														
Plate 426. 1892, Sept. 12.					Plate 444. 1892, Sept. 28.					Plate 426. 1892, Sept. 12.					Plate 444. 1892, Sept. 28.														
PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.														
a = - .01146 d = - .00087					a = - .01146 d = - .00049					a = - .01146 d = - .00087					a = - .01146 d = - .00049														
b = + .00084 e = - .01135					b = + .00030 e = - .01143					b = + .00084 e = - .01135					b = + .00030 e = - .01143														
c = - .1314 f = - .1410					c = - .0452 f = - .1492					c = - .1314 f = - .1410					c = - .0452 f = - .1492														
To obtain standard co-ordinates, ξ, η					To obtain standard co-ordinates, ξ, η					To obtain standard co-ordinates, ξ, η					To obtain standard co-ordinates, ξ, η														
ξ = x + ax + by + c					ξ = x + ax + by + c					ξ = x + ax + by + c					ξ = x + ax + by + c														
η = y + dx + ey + f					η = y + dx + ey + f					η = y + dx + ey + f					η = y + dx + ey + f														
64	-61.475	+30.741	65	4044	5.0	10	+25.010	+12.180		11	-20.110	-5.879		9	-19.233	-38.628		9	-57.471	+32.620	65	4086	10.0						
14	-59.610	+44.398	65	4045	9.1	11	+26.686	+52.286	65	4076	9.7	9	-19.233	-38.628		11	-54.651	+28.790											
10	-55.373	+23.832				9	+32.901	+41.508		10	-16.705	-33.799		10	-16.705	-33.799		10	-54.642	+23.059									
18	-53.194	+54.148	65	4047	8.6	15	+34.458	+11.204	65	4077	9.4	11	-12.708	-36.554		9	-52.000	+12.026											
13	-52.661	+29.322	65	4046	9.4	9	+35.800	+49.363		9	-12.381	-37.490		12	-50.601	+0.084	66	3708	9.8										
10	-52.811	+29.246				12	+35.948	+53.991	65	4078	9.5	11	-10.116	-49.299		11	-40.827	+24.058											
14	-48.112	+10.776	65	4048	9.6	12	+36.027	+49.163	65	4079	10.0	16	-9.714	-38.308	66	3681	9.4	18	-40.408	+5.002	66	3710	9.0						
9	-47.121	+64.062	65	4049	10.0	9	+37.664	+32.172		9	+37.664	+32.172		13	-9.212	-36.249	66	3682	10.0	15	-37.413	+61.293	65	4087	8.7				
14	-45.563	+17.093	65	4050	9.2	10	+37.831	+41.114		10	-8.919	-34.583		10	-8.919	-34.583		10	-35.740	+3.353									
12	-44.782	+38.258	65	4051	9.4	14	+37.911	+52.906	65	4080	9.4	9	-5.315	-11.716		9	-35.451	+61.781											
19	-43.574	+5.544	66	3674	9.0	61				61				121			11	-30.893	+9.656	65	4088	10.0							
11	-42.347	+45.626	65	4053	9.6	10	+39.173	+11.817		10	-5.282	-32.547		10	-5.282	-32.547		11	-26.348	+25.164									
14	-41.723	+19.317	65	4052	9.6	12	+39.424	+47.562	65	4081	10.0	22	-4.570	-37.929	66	3684	8.6	12	-21.277	+16.271									
14	-40.119	+14.659	65	4054	9.6	22	+42.424	+40.020	65	4082	8.2	10	-3.058	-38.930		14	-19.117	-25.485	66	3689	9.4	22	-16.283	+59.063	65	4089	8.2		
12	-38.241	+60.769	65	4055	9.2	9	+43.490	+37.893		9	-1.130	-44.162		9	-1.130	-44.162		12	-19.117	-25.485	66	3689	9.4	9	-14.481	+30.575			
15	-36.821	+61.071	65	4056	8.7	14	+43.494	+37.187	65	4083	9.2	9	-0.646	-17.925		14	+10.479	-10.286	66	3687	9.8	9	-14.481	+30.575					
13	-33.375	+40.139	65	4057	9.2	11	+43.723	+30.492	65	4085	10.0	12	+11.546	-27.871	66	3688	10.0	10	-12.286	+36.653									
10	-32.397	+6.160				15	+44.052	+49.790	65	4084	8.2	9	+1.432	-44.180		22	+22.055	-13.716	66	3692	8.5	24	-11.268	+34.212	65	4090	8.4		
10	-30.726	+54.790	65	4058	10.0	18	+44.227	+49.848		9	+2.626	-21.180		15	+23.223	-40.464	66	3693	9.2	13	-11.115	+62.906	65	4091	9.4				
10	-29.583	+34.320				14	+44.991	+6.397	66	3699	9.5	25	+3.748	-4.978	66	3686	8.2	10	-9.300	+21.005	65	4092	9.4						
17	-26.596	+3.370	66	3680	8.6	9	+46.490	+44.427		9	-0.646	-17.925		14	+10.479	-10.286	66	3687	9.8	13	-7.033	+56.723	65	4093	10.0				
10	-24.653	+10.065				10	+46.769	+11.662		10	-5.282	-32.547		20	+27.042	-3.774	66	3695	8.5	21									
10	-19.907	+42.388	65	4059	10.0	10	+50.295	+11.819		9	+29.410	-18.627		9	+29.410	-18.627		9	-5.752	+13.622									
11	-18.310	+55.779	65	4060	10.0	10	+56.095	+32.752		16	+29.623	-6.228	66	3696	9.0	16	+30.829	-51.791	66	3697	9.2	9	-3.504	+17.559					
12	-17.605	+55.135	65	4061	9.4	11	+58.618	+41.902		16	+30.829	-51.791	66	3697	9.2	16	+30.829	-51.791	66	3697	9.2	11	-1.890	+41.410					
12	-16.775	+32.090	65	4063	9.8	11	+58.645	+28.718	65	4086	10.0	10	+21.990	-44.768		10	+31.615	-17.835		24	-1.759	+23.959	65	4094	8.4				
13	-16.767	+15.979	65	4062	9.8	13	-61.495	-43.901	66	3666	9.6	10	+21.990	-44.768		10	+31.615	-17.835		13	-0.534	+6.288	66	3719	9.8				
9	-12.382	+45.880				13	-61.337	-29.135	66	3667	9.7	22	+22.055	-13.716	66	3692	8.5	11	-1.890	+41.410									
14	-12.200	+26.960	65	4064	9.4	20	-57.654	-36.904	66	3668	9.0	15	+23.223	-40.464	66	3693	9.2	14	+10.280	+58.625	65	4097	9.2						
9	-11.732	+26.628				9	-57.612	-41.314		9	-57.612	-41.314		10	+24.599	-34.773		11	+12.466	+18.083									
31						14	-55.040	-6.873	66	3669	9.3	14	+25.783	-42.348	66	3694	9.4	14	-9.300	+21.005	65	4092	9.4						
10	-11.454	+27.148				10	-51.323	-2.870		10	-51.323	-2.870		20	+27.042	-3.774	66	3695	8.5	21									
10	-11.132	+41.649				9	-50.304	-61.539		9	-50.304	-61.539		9	+29.410	-18.627		9	-3.504	+17.559									
11	-10.552	+49.338	65	4065	9.8	10	-47.433	-57.291		16	+29.623	-6.228	66	3696	9.0	16	+30.829	-51.791	66	3697	9.2	11	-1.890	+41.410					
13	-9.376	+18.447	65	4066	10.0	18	-45.973	-45.140	66	3670	8.7	16	+30.829	-51.791	66	3697	9.2	24	-1.759	+23.959	65	4094	8.4						
16	-8.806	+3.997	66	3683	8.8	9	-45.901	-4.270		9	-45.901	-4.270		10	+31.615	-17.835		13	-0.534	+6.288	66	3719	9.8						
10	-5.330	+22.198				13	-45.813	-26.967	66	3671	9.7	10	+21.990	-44.768		10	+31.615	-17.835		26	+2.234	+8.454	65	4095	8.4				
10	-4.479	+18.152				12	-45.541	-34.339		12	-45.541	-34.339		22	+22.055	-13.716	66	3692	8.5	11	+7.365	+46.038							
16	-3.023	+16.420	65	4067	9.2	11	-43.702	-14.976		11	-43.702	-14.976		9	+32.796	-4.799		14	+10.280	+58.625	65	4097	9.2						
12	-1.608	+29.614	65	4069	10.0	14	-43.520	-28.671	66	3672	9.4	12	+34.285	-11.079		9	+32.796	-4.799		14	+10.280	+58.625	65	4097	</				

Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.		Diam.	x	y	C.P.D.	
			No.	Mag.				No.	Mag.				No.	Mag.				No.	Mag.
	51,					111,				PLATE CENTRE. 23 ^h 6 ^m , — 66°. Plate 445. 1892, Sept. 28. PROVISIONAL CONSTANTS. a = — .01154 d = — .00036 b = + .00022 e = — .01154 c = — .1803 f = — .3909 To obtain standard co-ordinates, ξ, η ξ = x + ax + by + c η = y + dx + ey + f					51,				
9	+49°232	+ 0°127			10	+48°124	—11°249			10	—63°775	+25°250	65 4105	10°0	13	—40°675	—26°711	66 3740	9°4
11	+50°245	+ 0°004			9	+53°417	—31°208			16	—58°713	+24°278	65 4106	9°0	9	—37°464	— 1°359		
16	+54°003	+24°251	65 4106	9°0	12	+56°823	—40°172	66 3738	9°6	10	—51°754	+ 1°476			13	—35°690	—57°800	67 3942	9°2
11	+59°315	+ 1°020			11	+56°884	—52°033	66 3739	9°8	10	—45°242	+12°867			10	—23°375	+40°802		
13	—64°583	—46°791	66 3698	9°0						10	—44°016	+57°916	65 4107	9°7	11	—22°153	+28°460		
										9	—40°861	+ 6°494			11	—13°008	+10°348	65 4109	9°4
10	—63°775	— 8°681								13	—39°620	+ 7°190	66 3741	9°0	11	—11°982	+ 7°495	66 3747	9°4
11	—62°837	—63°112								9	—36°756	+16°722			9	— 4°551	+12°805		
9	—62°596	—53°636	66 3701	10°0						11	— 0°490	+48°514	65 4110	9°6	11	— 0°490	+48°514	65 4110	9°6
11	—60°119	—12°855	66 3702	10°0						9	—31°697	+51°356			11	— 0°282	+50°926	65 4111	9°6
13	—59°806	— 8°566	66 3703	9°4						9	—31°697	+51°356			9	+ 4°112	+12°771		
										10	—28°966	+32°420			10	+ 5°031	+59°397	65 4112	9°8
9	—58°720	—31°053								11					9	+ 6°087	+48°461		
20	—58°354	—42°020	66 3704	8°4						15	—27°745	+59°317	65 4108	9°0	11	+ 7°148	+64°542	65 4113	9°1
11	—56°330	—35°252	66 3705	10°0						10	—23°375	+40°802			16	+ 8°064	+42°840	65 4114	9°0
28	—55°252	—38°790	66 3706	8°2						9	—22°153	+28°460			9	+14°313	+57°851		
12	—51°279	—16°352	66 3707	10°0						11	—11°982	+ 7°495	66 3747	9°4	9	+15°071	+ 7°591		
															14	+17°425	+26°517	65 4115	9°1
10	—49°446	— 5°558								9	—40°861	+ 6°494			9	+17°809	+34°499		
12	—44°960	—16°740								13	—39°620	+ 7°190	66 3741	9°0	19	+19°899	+50°212	65 4116	8°8
34	—43°806	— 5°759	66 3709	7°6						9	—36°756	+16°722			10	+21°436	+61°705	65 4117	10°1
11	—42°958	— 4°735								9	—31°697	+51°356			10	+22°506	+32°206		
18	—37°084	—50°232	66 3711	8°7						10	—28°966	+32°420			11	—22°838	+12°170	65 4118	8°8
										15					12	+26°831	+ 4°135	66 3760	9°4
12	—35°370	—56°128	67 3921	9°2						10	—23°375	+40°802			13	+31°928	+ 1°567	66 3764	9°4
9	—32°437	—39°383								9	—22°153	+28°460			12	+34°573	+17°641	65 4119	9°4
16	—29°303	—36°302	66 3712	9°1						11	—11°982	+ 7°495	66 3747	9°4	9	+37°639	+63°492		
26	—27°774	—35°258	66 3713	7°8											12				
22	—23°968	—14°983	66 3714	8°4						15	—27°745	+59°317	65 4108	9°0	10	+ 6°087	+48°461		
										10	—23°375	+40°802			11	+ 7°148	+64°542	65 4113	9°1
15	—23°077	—16°839	66 3715	9°4						9	—22°153	+28°460			16	+ 8°064	+42°840	65 4114	9°0
15	—22°248	—19°032	66 3716	9°4						11	—13°008	+10°348	65 4109	9°4	9	+14°313	+57°851		
9	—20°204	—35°742								11	—11°982	+ 7°495	66 3747	9°4	9	+15°071	+ 7°591		
9	—19°320	—34°309								9	— 4°551	+12°805			14	+17°425	+26°517	65 4115	9°1
12	—18°377	—13°267	66 3717	9°8						11	— 0°490	+48°514	65 4110	9°6	9	+17°809	+34°499		
	81									11	— 0°282	+50°926	65 4111	9°6	19	+19°899	+50°212	65 4116	8°8
22	—16°094	—28°917	66 3718	8°5						9	+ 4°112	+12°771			10	+21°436	+61°705	65 4117	10°1
10	—15°963	—33°161								10	+ 5°031	+59°397	65 4112	9°8	10	+22°506	+32°206		
12	—15°546	—37°346								15					11	—22°838	+12°170	65 4118	8°8
10	— 1°034	—59°030								10	—23°375	+40°802			12	+26°831	+ 4°135	66 3760	9°4
11	+ 3°932	—42°462								9	—22°153	+28°460			13	+31°928	+ 1°567	66 3764	9°4
										9	—36°756	+16°722			12	+34°573	+17°641	65 4119	9°4
16	+ 4°308	—14°752	66 3720	9°0						10	—28°966	+32°420			9	+37°639	+63°492		
14	+ 8°286	—21°767	66 3721	9°7						15					12				
10	+12°326	—29°741								10	—23°375	+40°802			10	+ 6°087	+48°461		
13	+16°959	—35°257	66 3722	9°4						9	—22°153	+28°460			11	+ 7°148	+64°542	65 4113	9°1
12	+18°988	—23°590								9	—36°756	+16°722			16	+ 8°064	+42°840	65 4114	9°0
	91									9	—31°697	+51°356			9	+14°313	+57°851		
22	+20°753	—52°819	67 3932	8°5						9	—31°697	+51°356			9	+15°071	+ 7°591		
13	+23°135	—24°021	66 3723	10°0						10	—28°966	+32°420			14	+17°425	+26°517	65 4115	9°1
24	+24°251	— 3°210	66 3725	8°8						15					9	+17°809	+34°499		
17	+24°267	—27°522	66 3726	9°2						10	—23°375	+40°802			19	+19°899	+50°212	65 4116	8°8
12	+24°321	—60°186	67 3933	10°0						9	—22°153	+28°460			10	+21°436	+61°705	65 4117	10°1
										9	—36°756	+16°722			10	+22°506	+32°206		
13	+26°237	—31°977								15					11	—22°838	+12°170	65 4118	8°8
12	+27°221	—23°255								10	—23°375	+40°802			12	+26°831	+ 4°135	66 3760	9°4
10	+29°090	—33°574								9	—22°153	+28°460			13	+31°928	+ 1°567	66 3764	9°4
19	+31°537	—58°489	67 3934	8°6						9	—36°756	+16°722			12	+34°573	+17°641	65 4119	9°4
11	+31°672	—63°195	67 3935	9°5						10	—28°966	+32°420			9	+37°639	+63°492		
	101									15					12				
14	+31°758	—52°303	66 3728	9°7						10	—23°375	+40°802			10	+ 6°087	+48°461		
13	+32°525	— 1°580	66 3727	9°5						9	—22°153	+28°460			11	+ 7°148	+64°542	65 4113	9°1
12	+34°493	—50°359	66 3729	10°0						9	—36°756	+16°722			16	+ 8°064	+42°840	65 4114	9°0
12	+34°839	—51°077	66 3730	10°0						9	—31°697	+51°356			9	+14°313	+57°851		
13	+35°963	—33°488	66 3731	10°0						9	—31°697	+51°356			9	+15°071	+ 7°591		
										10	—28°966	+32°420			14	+17°425	+26°517	65 4115	9°1
26	+37°885	—12°506	66 3732	8°2						15					9	+17°809	+34°499		
13	+38°161	—27°541	66 3733	10°0						10	—23°375	+40°802			19	+19°899	+50°212	65 4116	8°8
14	+38°575	—20°138	66 3734	9°8						9	—22°153	+28°460			10	+21°436	+61°705	65 4117	10°1
15	+41°838	—44°513	66 3735	9°2						9	—36°756	+16°722			10	+22°506	+32°206		
22	+45°743	—34°001	66 3736	8°5						15					11	—22°838	+12°170	65 4118	8°8
										10	—23°375	+40°802			12	+26°831	+ 4°135	66 3760	9°4
										9	—22°153	+28°460			13	+31°928	+ 1°567	66 3764	9°4
										9	—36°756	+16°722			12	+34°573	+17°641	65 4119	9°4
										10	—28°966	+32°420			9	+37°639	+63°492		
										15					12				
										10	—23°375	+40°802			10	+ 6°087	+48°461		
										9	—22°153	+28°460</							

RECTANGULAR CO-ORDINATES.

[illegible]

RECTANGULAR CO-ORDINATES.

23^h 42^m, - 66°

23 ^h 42 ^m , - 66°.					23 ^h 42 ^m , - 66°.					23 ^h 42 ^m , - 66°.					23 ^h 42 ^m , - 66°.				
C.P.D.					C.P.D.					C.P.D.					C.P.D.				
No. Mag.					No. Mag.					No. Mag.					No. Mag.				
PLATE CENTRE.					PLATE CENTRE.					PLATE CENTRE.					PLATE CENTRE.				
23 ^h 42 ^m , - 66°.					23 ^h 42 ^m , - 66°.					23 ^h 42 ^m , - 66°.					23 ^h 42 ^m , - 66°.				
Plate 4094. 1917, Oct. 10.					Plate 4094. 1917, Oct. 10.					Plate 4094. 1917, Oct. 10.					Plate 4094. 1917, Oct. 10.				
PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.					PROVISIONAL CONSTANTS.				
a = - .01157 d = - .00013					a = - .01157 d = - .00013					a = - .01157 d = - .00013					a = - .01157 d = - .00013				
b = + .00011 e = - .01151					b = + .00011 e = - .01151					b = + .00011 e = - .01151					b = + .00011 e = - .01151				
c = - .0468 f = + .0438					c = - .0468 f = + .0438					c = - .0468 f = + .0438					c = - .0468 f = + .0438				
To obtain standard co-ordinates, ξ, η					To obtain standard co-ordinates, ξ, η					To obtain standard co-ordinates, ξ, η					To obtain standard co-ordinates, ξ, η				
$\xi = x + ax + by + c$					$\xi = x + ax + by + c$					$\xi = x + ax + by + c$					$\xi = x + ax + by + c$				
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